DRAFT CS 17/7/08

RED FLAG CONDITIONS: A guide for acupuncturists

Contents

How to use this guide to Red Flags

In the main part of this guide the tables of Red Flags are **ordered by physiological system.** This is the way in which information is ordered within a medical text book. If the Red Flags are to be incorporated into a structured teaching programme on clinical medicine, then this structure enables the Red Flags to be taught in a systematic way. In this part of the guide you are also given some explanation as to why the respective Red Flag syndromes merit consideration for referral.

However, in the clinic symptoms do not arise in a systematic way. We are more likely to ask, "Is this symptom/sign serious?" rather than, "I wonder if there are any serious symptoms arising from this patient's digestive system?" For this reason, the Red Flags have also been sorted in **Appendix I** by **keyword** (for example headache, abdominal pain, eye problem, menstrual disorder) so that you can easily check on Red Flags when in the clinic. The Red Flags sorted by keyword are less detailed with explanatory information, but are referenced to the more detailed summaries in the first section of the guide so that you can find out more information if you need it.

Finally this list has been further pared down in **Appendix II** to give you a summary of **urgent Red Flags**. These are the ones which it is well worth taking time to understand and commit to memory so that you can act appropriately and efficiently should a situation of medical urgency arise in your clinic. This list has been drawn together as a supplement to first aid training for acupuncturists.

Introduction: Why a summary of Red Flags?

These tables of red flag symptoms and signs are intended as a guide for you to use in your acupuncture practice. The listed syndromes (i.e. clusters of symptoms and signs[1]) point to possible conditions which, if they are present, might merit a referral to a medical practitioner. All these symptoms and signs have been included in the tables simply because it has been considered by the author that in seeing the medical practitioner, the patient with these symptoms and signs is likely to benefit, in terms of medical management of their condition, **over and above** the benefit they will be receiving from acupuncture treatment.

Very few of these syndromes are absolute indicators of the need to refer. They have been written to reflect current medical opinion about when evidence suggests that further tests may be needed, or treatment instigated. The rationale for the inclusion of each syndrome in this table is written alongside each syndrome so that you can understand why these symptoms and signs have

[1] According to medical convention, a symptom is what the patient experiences about their condition (for example headache, hot flush, nausea), and a sign is what can be found on physical examination (for example coated tongue, purpuric rash, deformed knee joint).

been included. You may decide, on the basis of your own experience and your understanding of the patient's condition, not to refer. The information in these tables is simply intended to help you make as informed a decision about referral as possible.

Please note that not all of these conditions are those which require medical treatment. In some cases you are advised to refer for tests to exclude an unlikely but important treatable condition (for example in the case of a mole which might have features of skin cancer), or, to obtain a medical diagnosis to guide you in your own treatment of the condition (for example in the case of ascertaining the severity and cause of suspected anaemia). In other situations you may wish to refer so that the patient can have access to medical advice which you may feel unqualified to give (for example on the complexity of assessing coronary risk and how this impacts on subsequent choice of medical treatment).

In summary referral may be considered for the following four broad reasons:

- To enable the patient to have access to **medical treatment** which will benefit their condition
- For **investigations** to exclude the possibility of serious disease
- For **investigations** to confirm a diagnosis and help guide your treatment
- For access to **advice** on the management of a complex condition

Not all of these conditions by any means merit emergency referral, and so in these tables you are also given a broad indication of with what sort of level of priority the referral might need to be made.

Priority of referral of patients with Red Flag symptoms and signs:

In these Red Flag tables the urgency of referral is described as falling into one or more of three categories; **non urgent, high priority** and **urgent.** These categories reflect the three different ways by which a patient can access a medical consultation in the U.K. The three categories are described in more detail below:

* **Non urgent**; A non urgent referral means that the patient can be encouraged to make a routine appointment with the medical practitioner (GP) and this ideally will take place within 7 days at the most. For most of these Red Flags a non

urgent referral is sufficient, simply because an earlier medical response would not bring great added benefit for the patient, and so requesting the more anxiety provoking and NHS resource-consuming urgent consultation is not necessary. In most situations a patient can self refer, but if you wished to make a formal referral then this is the situation when a **structured typed referral letter** (for more details about what to put in this see next section) would be appropriate. The patient could take this letter to the appointment with them, and this would eliminate any delays which might result from relying on the postal service.

**** **High priority:** A high priority appointment means that the patient is assessed by a medical practitioner within the same day. This can be either as a home visit or at the medical practice. The patient can request this sort of appointment for themselves, but if you wished to refer to explain your concerns, you could either ask to speak to the attending doctor by **telephone** or you could give the patient a **hand written letter** (for guidance on what to put in this letter see the next section) to take with them.

***** **Urgent:** The urgent category is for those situations when the patient requires immediate medical attention, and this may mean summoning an on call doctor or calling the paramedics to the scene. In these cases information has to be imparted by **telephone**, but a **handwritten note of information** to go with the patient can be a useful additional means of communication. As an appendix to this guideline (**Appendix II**) you will find a summary of all the Red Flags which have been assigned an urgent priority rating. In this appendix summary you will also find some first aid advice about how to manage the situation whilst you are waiting for help to arrive.

For many of the Red Flag conditions listed in these tables it is not possible to be absolute about the priority of referral, and often two categories of priority are suggested. The decision about which is the most appropriate category would depend upon the unique characteristics of the case in question. For example, in most cases of referral to exclude a possible diagnosis of cancer it might be appropriate to refer non urgently (i.e. patient is seen within the week, but not necessarily on the same day). However, if the patient was very anxious, or if the symptoms seemed to be progressing rapidly, then of course a same day referral could be more beneficial.

Use of acupuncture when referring

In most situations, even if an urgent referral has been made, it is still entirely acceptable to continue to administer acupuncture to your patient as long as you are clear that informed consent has been given. There are very few conditions in which acupuncture is absolutely contraindicated[2], and so in most cases when you refer, there is no reason for you not to continue to administer acupuncture.

Communication with medical professionals:

Whenever you refer, information needs to be imparted to the medical practitioner. In many cases the patient is more than capable of performing this task. However in all urgent situations, and in some non urgent and high priority situations, it will be appropriate for you also to communicate information about the case. Whether by the spoken word or by letter, this is best done in a structured way, and with the information offered in an order which is familiar to the medical practitioner. If you need to communicate by phone, it is worth making notes for all the categories of information listed overleaf before you make contact. This will ensure that you give all the necessary information in a logical order. General practitioners tend to be overburdened with paperwork, and so it is important that your letter offers information in a succinct and accessible format. Therefore keep the information in brief bulleted statements, and definitely don't go over one page in length!

[2] You need only to be cautious about administering acupuncture in situations in which you are concerned that the patient may be at **increased risk of infection** because they are **severely immunocompromised** (for example patients on chemotherapy or immunosuppressant medication, those with disseminated cancer and HIV/AIDS) or if they are at an **increased risk of bleeding** (for example patients with a platelet or clotting factor deficiency, or those on anticoagulant medication). In these situations it is best first to confirm with a medical practitioner that acupuncture would be acceptable treatment.

Information to include when referring a patient to a medical practitioner

(use this checklist when referring either by letter or by phone):

Patient identifiers:

Give full name, date of birth and address. All three of these are required for medical records.

Brief summary of reason for referral:

In one sentence: something like: “I’d be grateful if you could assess this 28 year old man who tells me he has had three episodes of nocturnal bedwetting”.

More detailed history of main complaint

A brief synopsis of the key events in the history of the main complaint, including:

Symptoms

Describe the symptoms as described by the patient

Signs

Then describe any findings (including relevant negatives like “blood pressure was normal”) on clinical examination.

Drug history

Summarise the medication the patient is currently taking (including contraceptives and non prescribed medication such as indigestion remedies).

Social history

List any relevant lifestyle factors; such as smoking, alcohol use, and occupational factors which might have impacted on the current condition.

Summarise what you want the medical practitioner to do

For example: **“**I am concerned that this man might be experiencing nocturnal seizures, and would value your opinion on whether he needs further investigations”.

If you want….describe a little about how you have been treating with acupuncture

A referral is a good opportunity to explain more about what you do. Probably best not to use too much Chinese Medical language or “energy-speak” in a referral situation, but a couple of sentences on why the patient is having acupuncture and how they are benefiting can do no harm.

Further reading

The following books are written by doctors for doctors. They will give you added insight into the decision processes involved when doctors interpret symptoms and signs, and how they discern which of these constitute red flags.

- Ali, N. **Alarm Bells in Medicine** (2005) Blackwell Publishing.
- Hopcroft, K. Forte, V. **Symptom Sorter** (3rd edition) (2003) Radcliffe publishing.

Red Flags tables ordered by physiological system: Contents

1. RED FLAGS OF CANCER			
	Description	**Reasoning**	**Priority**
1.1	**Progressive** unexplained **symptoms** over weeks to months: **e.g. weight loss,** recurrent **sweats** (especially at night), **fevers** and poor **appetite.**	Symptoms which progress (i.e. gradually worsen rather than fluctuate in intensity) over this sort of time period are strongly suggestive of cancer. N.B. there is usually no need to request a high priority referral when wanting to exclude a diagnosis of cancer, as this might increase rather than allay anxiety. Only consider high priority referral if you suspect rapidly progressive disease, or if the patient is already very anxious.	** *
1.2	An unexplained **lump:** characteristically **hard, irregular, fixed and painless**	Cancerous lumps are usually irregular, may be fixed to associated tissues, and often are painless unless they obstruct viscera, cause pressure on other structures, grow into bone or grow into nerve roots.	** *
1.3	Unexplained **bleeding:** either from surface of skin, or emerging from an internal organ such as bowel, bladder or uterus.	Cancerous tissue is poorly organized, and bleeding may easily be provoked from the surface of an epithelial tumour (e.g. of breast, skin, lung, mouth, stomach, bowel, bladder or uterus).	** *
1.4	Features of **bone marrow failure**: Severe progressive **anaemia** (see also Red flags of anaemia: Table 16)**,** recurrent progressive **infections** or **bruising, purpura** and **bleeding**	Secondary cancer and cancer of blood cells often infiltrate the bone marrow and prevent it from performing its role of producing healthy red and white blood cells and platelets. Purpura is pin point bruising which appears like a rash of flat purplish spots, and is one of the signs of a low platelet count. (See also Red flags of lymphoma and leukaemia: Table 18)	*** **
1.5	**Multiple enlarged lymph nodes** (greater than 1 centimetre in diameter) but painless, with no other obvious cause (e.g. known glandular fever infection).	Groups of lymph nodes can be found in the cervical region, in the armpits (axillary nodes) and in the inguinal creases (groin). In health, lymph nodes are usually soft impalpable masses of soft tissue, but these can enlarge and become more palpable when the node is active in fighting an infection, or if It is infiltrated by tumour cells. If a number of nodes are enlarged (to more than 1 cm in diameter) this may signify a generalized infectious disease such as glandular fever or HIV/AIDS. The other important cause of widespread lymph node enlargement	** *

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		(lymphadenopathy) is disseminated cancer, and in particular, the cancers of the white blood cells, leukaemia and lymphoma. If multiple enlarged lymph nodes are found it is best to refer for a diagnosis, and as a high priority if the patient is unwell with other symptoms.	
1.6	**A single markedly enlarged lymph node** (greater than 2 cm in diameter) with no other obvious cause.	Even in the situation of infection it is unusual for a lymph node to become very enlarged. Cancerous infiltration can lead to a firm grossly enlarged lymph node which may be painless. This is particularly typical of lymphoma.	** *
1.7	**Ascites: painless abdominal swelling** due to fluid accumulation.	Abdominal epithelial malignancies such as colon cancer, stomach cancer and ovarian cancer may lead to the accumulation of fluid within the abdominal cavity, which initially may be painless. This sign is known as ascites. Ascites is a sign that the cancer has metastasized and so carries a poor prognosis. Other causes of ascites include chronic congestive cardiac failure, liver failure and kidney disease.	

2. RED FLAGS OF INFECTIOUS DISEASES
Vulnerable groups

	Description	**Reasoning**	**Priority**
	Treat anyone from the following vulnerable groups with caution if they are displaying features of an infectious disease (e.g. **fever, confusion, diarrhoea and vomiting, spreading areas of inflammation** or **yellowy discharges**). :		If concerned
2.1	**Infants** (especially if less than 3 months old).	Infections in infants can become serious conditions very quickly because of the immature immune system, poor temperature control and small size. They lead easily to high fever and dehydration. The infant is at increased risk of convulsions and circulatory collapse. However, in this age group fever is common, and usually is **not** serious.	**

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2.2	The **elderly**	Infections can take hold rapidly in the elderly because of a weakened immune system. Serious disease can “hide” behind mild appearing symptoms.	**
2.3	The **immunocompromised**	The immunocompromised are particularly vulnerable to severe overwhelming infections, in particular of respiratory and gastrointestinal system	**
2.4	In **pregnancy**	Certain infections can directly damage the embryo/fetus or lead to miscarriage. Others may be transmitted to the baby during labour. Prolonged high fever may induce miscarriage or early labour.	**
2.5	Anyone with a **recent history of travel** to a tropical country (within the past month)	Certain tropical diseases (including malaria) can become rapidly overwhelming and may present up to 4 weeks after return from the tropical country.	**

3. RED FLAGS OF INFECTIOUS DISEASES
Fever, Dehydration and Confusion

	Description	Reasoning	Priority
	Definitions: **Normal body temperature**: 36.8°C +/- 0.7°C) **Fever:** body temperature > 37.5°C **Moderate fever:** 37.5-38.5°C **High fever:** body temperature > 38.5°C		If concerned
3.1	**High fever in a child (< 8yrs of age)** not responding to treatment within 2 hours	High fevers can promote infantile convulsions in young children. Treatment to bring the temperature down includes keeping the environment cool, tepid sponging, and gentle medical approaches such as acupuncture or homeopathy. If all else fails antipyretic medication such as paracetamol or ibuprofen suspension could be considered.	**
3.2	**High fever in an older child or adult** which does not respond to treatment within 48 hours	Although risk of convulsions is low in this group of patients, a high fever is very depleting and can lead to dehydration. If a high fever is not responding to your treatment in two days, this suggests the possibility of a serious condition which	**

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		merits further investigations.	
3.3	**Any fever** which persists or recurs over > 2 weeks	Most mild infectious diseases have run their course within a week; a prolonged fever suggests either a chronic inflammatory or infectious condition, or cancer, all of which merit further investigations.	** *
3.4	**Dehydration in an infant:** Signs include **dry mouth and skin, loss of skin turgor** (firmness), **drowsiness, sunken fontanelle** (soft spot in region of Du24) and **dry nappies.**	A dehydrated infant is at high risk of circulatory collapse because of small size and immature homeostatic mechanisms. Infants who are dehydrated may lose the desire to drink, and so the condition can rapidly deteriorate.	*** **
3.5	**Dehydration in older children and adults** if severe or prolonged for more than 48 hours. Signs include **dry mouth and skin, loss of skin turgor, low blood pressure, dizziness on standing** and **poor urine output.**	Although not as unstable as an infant, a dehydrated child or adult still needs hydration to prevent damage to the kidneys. Referral should be made if the patient is unable to take fluids or if the dehydration persists for more than 48 hours. Refer elderly people immediately as the ability to take in fluids is often reduced and the kidneys and brain are more vulnerable to damage.	**
3.6	**Confusion in older children and adults with fever.**	Confusion is common and benign in young children (< 8 years of age) and also elderly frail people when a fever develops. However it is not usual in healthy adults and should be referred to exclude central nervous system involvement (for example meningitis or brain abscess).	**
3.7	**Febrile convulsion in child:** ongoing.	Refer a case in which the convulsion is not settling within 2 minutes as an emergency. Ensure the child is kept in a safe place in the recovery position whilst help arrives.	***
3.8	**Febrile convulsion in child:** recovered.	Refer all cases in which the child has just suffered from a febrile convulsion (the parents need advice on how to manage future fits, and the child should be examined by a doctor).	**

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4. RED FLAGS OF DISEASES OF THE MOUTH			
	Description	**Reasoning**	**Priority**
4.1	**Persistent oral thrush (candidiasis)** (appearing as a thick white coating on tongue or palate).	Although common in the newborn, oral thrush in children and adults is not a normal finding, and merits referral to exclude an underlying cause. Common causes include corticosteroid use (including asthma inhalers), diabetes, immunodeficiency (including HIV/AIDS) and cancer. Dentures in elderly people can also predispose to oral thrush.	*
4.2	**Persistent painless white plaque (leukoplakia)** (appearing as a coat which appears to sit on the surface of the sides of the tongue).	Leukoplakia is a precancerous change which signifies an increased risk of mouth cancer. It is more common in smokers and in those with a high alcohol intake. A particular form of leukoplakia is also associated with HIV/AIDS. Early treatment of leukoplakia can prevent invasive mouth cancer, so referral is merited.	*
4.3	**Painless enlargement of a salivary gland** over weeks to months.	This needs referral to exclude salivary gland cancer, which is most common in people over the age of 60yrs.	*
4.4	**Painful or painless enlargement of salivary gland** immediately after eating.	This suggests a salivary gland stone or obstruction from dried secretions. Early treatment is to maximize hydration by encouraging drinking, and to encourage salivation (e.g. with lemon juice). If the problem is persistent referral is recommended as surgical removal of stone may be necessary.	*
4.5	**Tender or inflamed gums or salivary glands** which do not respond within days to your treatment.	May be accompanied by fever or malaise. These symptoms suggest dental abscess or infection of salivary gland, and if they persist indicate a need for referral for antibiotic treatment to prevent inflammatory damage to dental roots or salivary glands.	**
4.6	**Ulceration of mouth** if persistent (for more than one week) or if preventing proper hydration.	The most common cause of painful ulceration of the mouth is herpes simplex. This can be so severe as to inhibit drinking in a child. If this is the case the child may need to be hospitalized for rehydration. If ulceration persists over 2 weeks then this might suggest an underlying inflammatory condition (such as Crohn's disease) or mouth cancer which will	**

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		require further investigation. Rarely severe mouth ulceration can be the first sign of bone marrow failure (see Warning features of cancer: Table 1), and in this case results from a very low white blood cell count.	

5. RED FLAGS OF DISEASES OF THE OESOPHAGUS			
	Description	**Reasoning**	**Priority**
5.1	**Difficulty swallowing (dysphagia) which is worse with solids** (in particular if progressive over days to weeks).	A sensation of difficultly in swallowing or a lump in the throat is a common and often benign symptom, which may fluctuate with emotional stress (in this case known as “globus hystericus”). Usually swallowing of food is still possible with this form of dysphagia. However, if there is a physical obstruction in the oesophagus, which may be the result of cancer or stricture (scarring), then there may be progressive difficulty in swallowing stiff foods, and this will be accompanied by a loss of weight. This needs prompt referral.	** *
5.2	**Difficulty swallowing (dysphagia) associated with enlarged lymph nodes in he neck**	See notes above. If dysphagia is also associated with enlarged lymph nodes this will raise the possibility of a malignant or inflammatory cause and merits referral.	** *
5.3	**Swallowing associated with central chest pain (behind the sternum)**	If swallowing is associated with a delayed pain behind the sternum, this suggests oesophagitis or structural damage to the oesophagus (e.g. tear or puncture by fishbone). Refer if not settling within 24 hours or sooner if pain is severe.	*

6. RED FLAGS OF DISEASES OF THE STOMACH			
	Description	**Reasoning**	**Priority**
6.1	**Severe diarrhoea and vomiting** if lasting more than 24 hours in infants or the elderly	In most cases diarrhoea and vomiting is self limiting and will need no medical intervention. However infants and the elderly are vulnerable to dehydration and should be referred for assessment if symptoms continue for more than 24 hours	*** **

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6.2	**Diarrhoea and vomiting** if continuing for more than 5 days in otherwise healthy adults	See notes above. If symptoms persist for more than 5 days this is unusual and merits referral for investigation of infectious or inflammatory causes. Food poisoning and dysentery are notifiable diseases*.	**
6.3	**Diarrhoea and vomiting** associated with features of dehydration (see Table 3)	If features of dehydration are apparent: low blood pressure, dry mouth, concentrated urine, poor skin turgor, confusion, then refer as a matter of high priority, and urgently in infants and the elderly as continuing vomiting will exacerbate an already unstable situation. Food poisoning and dysentery are notifiable diseases*.	*** **
6.4	**Vomiting of fresh blood or altered blood** (looks like dark gravel or coffee grounds)	The appearance of blood in the vomit is always of concern as it is not possible to gauge the severity of bleeding and whether or not the internal bleeding is continuing. Refer if more than about a tablespoon of blood appears in the vomit (small amounts may simply be the result of a tear of the oesophagus lining during vomiting) The blood may originate from the stomach or the duodenum and may indicate peptic ulcer disease or stomach cancer. Refer urgently if there are any signs of shock (faintness/dizziness/low blood pressure/high pulse rate) as this suggests that there could be significant internal blood loss.	*** **
6.5	**Projectile vomiting** persisting more than 2 days	Projectile vomiting (vomit appears at higher speed than usual) suggests high obstruction to the outflow of the stomach and should be referred as there is high risk of loss of fluids and salts. Refer straightaway if this is suspected in a baby (a sign of the congenital deformity of pyloric stenosis).	*** **

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6.6	**Epigastric pain** or **dyspepsia** for the first time in someone over the age of 40 or in anyone if resistant to treatment after 6 weeks.	Pain from the stomach or duodenum typically radiates to the epigastric region (between Ren 12-14). If the stomach is inflamed this area can be tender on palpation and may be accompanied by a sensation of acidity or fullness (dyspepsia). However these symptoms are very common and can respond well to dietary modification and acupuncture. Only refer if not responding to your treatment within 6 weeks or if presenting for the first time in someone over the age of 40 (as the risk of cancer is more common in older age groups). Persistent dyspeptic symptoms may result from Helicobacter pylori infection and are likely to respond well to antibiotic treatment. Chronic helicobacter infection is associated with an increased risk of stomach cancer as well as peptic ulceration, so medical opinion is that this infection should be treated.	*
6.7	**Altered blood in stools (melaena).** Stools look like black tar.	Altered blood in stools (stools look tarry and have an unusual metallic smell) indicates bleeding from the more proximal aspects of the digestive tract including the stomach. If melaena is apparent in the stools then bleeding is significant and merits prompt referral.	*** **
6.8	**Onset of severe abdominal pain with collapse ("The acute abdomen").** The pain can be constant or colicky (coming in waves). Rigidity, guarding and rebound tenderness are serious signs.	"The acute abdomen" is a term which refers to the combination of severe abdominal pain together with inability to continue with day to day activities ("collapse"). This syndrome can have benign causes such as irritable bowel syndrome, dysmenorrhoea and ovulation pain. You should refer to exclude more serious possibilities including appendicitis, perforated ulcer, peritonitis, obstructed bowel, pelvic inflammatory disease and gallstones. Colicky pain indicates obstruction of a viscus (hollow organ). Rigidity or the abdomen, guarding (reflex protective spasm of the abdominal muscles) and rebound tenderness (pain felt elsewhere in abdomen when pressure of palpating hand is released) all suggest inflammation or perforation of a viscus.	*** **

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7. RED FLAGS OF DISEASES OF THE PANCREAS			
	Description	**Reasoning**	**Priority**
7.1	**Symptoms of acute pancreatitis** (Acute pancreatitis presents as the acute abdomen (see Table 6) with severe central abdominal and back pain, vomiting and dehydration.)	Pancreatitis is a serious inflammatory condition of the pancreas which may develop for no obvious reason, but can be associated with high alcohol consumption or gall stone obstruction. The patient needs to be nil by mouth and urgently referred for supportive hospital care.	***
7.2	**Symptoms of chronic pancreatitis** (central abdominal and back pain, weight loss and loose stools over weeks to months)	Chronic pancreatitis may result from long term alcohol abuse, episodes of acute pancreatitis or may be due to inherited tendency. The scarred pancreas can generate deep chronic pain and the lack of digestive enzymes can lead to the syndrome of malabsorption (see Table 7). There is a risk of diabetes.	** *
7.3	**Malabsorption syndrome** (loose pale stools and malnutrition; weight loss, thin hair, dry skin, cracked lips and peeled tongue). Will present as failure to thrive in children.	The malabsorption syndrome results when there is inability to absorb the nutrients in the diet, and weight loss and mineral and vitamin deficiencies result. Loose stools are the result of the presence of unabsorbed fat. Chronic pancreatitis is one of the causes of the malabsorption syndrome (see Table 7).	** *
7.4	**Jaundice** (yellowish skin, yellow whites of the eyes and maybe dark urine and pale stools) Itch may be a prominent symptom	Jaundice results from a problem in the production of the bile by the liver or an obstruction to its outflow via the gall bladder into the duodenum. Pancreatic cancer may cause jaundice by growing to obstruct the outflow of the bile via the bile duct. Jaundice always merits referral for investigation of its cause.	**

8. RED FLAGS OF DISEASES OF THE LIVER			
	Description	**Reasoning**	**Priority**

Key to priority rating:	
*	refer non urgently (ensure patient is seen within the week)
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**	refer as a high priority (ensure patient is seen by doctor in same day)
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***	refer urgently (call 999/speak to on call doctor asap)

8.1	**Jaundice** (yellowish skin, yellow whites of the eyes and maybe dark urine and pale stools) Itch may be a prominent symptom.	Jaundice results from a problem in the production of the bile by the liver or an obstruction to its outflow via the gall bladder into the duodenum. Jaundice may result from inflammation of the liver (hepatitis) or from liver cancer. Hepatitis can be a result of infection (for example Hepatitis A, B and C and glandular fever) but can also result from the negative effects of certain prescription medications and excess alcohol on the liver tissue. Jaundice always merits referral for investigation of its cause. Viral hepatitis of any form is a notifiable disease*[3]	**
8.2	**Right hypochondriac pain** (pain under the R ribs) **with malaise** for more than 3 days	This suggests liver or gallbladder pathology and should be considered for investigation even in the absence of jaundice if persisting from more than 3 days.	**
8.3	**Vomiting of fresh blood or altered blood** (looks like dark gravel or coffee grounds)	The appearance of blood in the vomit is always of concern as it is not possible to gauge the severity of bleeding and whether or not the bleeding is continuing. Refer if more than about a tablespoon of blood appears in the vomit (small amounts may simply be the result of a tear of oesophagus lining during vomiting). There can be profuse bleeding from the base of the oesophagus in chronic liver disease as distended varicose veins (varices) can rupture in this site. The patient in this situation can easily go into shock (see Table 17) and needs to be handled as an emergency.	***

3

Notifiable diseases*
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8.4	The syndrome of **oedema, bruising** and **confusion** in someone with known liver disease	Liver disease may remain in a stable state for months to years, but the patient may become suddenly much more unwell once a certain point of progression of the disease has passed. This is the point at which the liver is no longer able to perform its function of manufacture of blood proteins and detoxification. Bruising, oedema and confusion can result. This syndrome requires urgent medical management.	**

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9. RED FLAGS OF DISEASES OF THE GALLBLADDER			
	Description	**Reasoning**	**Priority**
9.1	**Jaundice** (yellowish skin, yellow whites of the eyes and maybe dark urine and pale stools) Itch may be a prominent symptom.	Jaundice results from a problem in the production of the bile by the liver or an obstruction to its outflow via the gall bladder into the duodenum. Jaundice may result from sudden obstruction of the flow of bile by a gallstone. In this case it is usually accompanied by severe colicky pain. It can also develop gradually as a result of gradual obstruction by a tumour of the gallbladder or duct. Jaundice always merits referral for investigation of its cause.	**
9.2	**Right hypochondriac pain** (pain under the R ribs) **with malaise** for more than 3 days	This suggests liver or gallbladder pathology and should be considered for investigation even in the absence of jaundice if persisting from more than 3 days.	**
9.3	**Right hypochondriac pain** which is very intense and comes in waves. May be associated with fever and vomiting. May be associated with **jaundice.** This is one of the manifestations of the **acute abdomen** (See Table 6)	Obstruction of bile ducts by gallstones causes waves of intense pain as the duct attempts to contract against the obstruction. Fever and malaise can develop as the obstructed gallbladder becomes inflamed	**

10. RED FLAGS OF DISEASES OF THE SMALL INTESTINE AND COLON			
	Description	**Reasoning**	**Priority**
10.1	**Malabsorption syndrome** (loose pale stools and malnutrition; weight loss, thin hair, dry skin, cracked lips and peeled tongue). Will present as failure to thrive in children.	The malabsorption syndrome results when there is inability to absorb the nutrients in the diet, leading to weight loss and mineral and vitamin deficiencies. Loose stools are the result of the presence of unabsorbed fat. Disease of the small intestine (most commonly coeliac disease and Crohn's disease) can result in the malabsorption syndrome.	** *

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10.2	**Diarrhoea** with **mucus and gripy pain** if not responding to treatment within a week	Persistent diarrhoea with mucus suggests either a serious episode of bowel infection or an episode of inflammatory bowel disease (Crohn's disease or ulcerative colitis). Both causes merit prompt referral for treatment	**
10.3	**Onset of severe abdominal pain with collapse ("The acute abdomen").** The pain can be constant or colicky (coming in waves). Rigidity, guarding and rebound tenderness are serious signs.	The acute abdomen is a phrase which refers to the combination of severe abdominal pain together with inability to continue with day to day activities ("collapse"). This syndrome can have benign causes such as irritable bowel syndrome, dysmenorrhoea and ovulation pain. You should refer to exclude more serious possibilities including appendicitis, perforated ulcer, peritonitis, obstructed bowel, pelvic inflammatory disease and gallstones. Colicky pain indicates obstruction of a viscus (hollow organ). Rigidity or the abdomen, guarding (reflex protective spasm of the abdominal muscles) and rebound tenderness (pain felt elsewhere in abdomen when pressure of palpating hand is released) all suggest inflammation or perforation of a viscus. Features of abdominal pain in children which suggest a more benign (functional) cause include; mild pain which is worse in the morning, location around the umbilicus, and pain is worse with anxiety.	*** **
10.4	Any episode of **blood mixed in with stools**	Red blood mixed in with stools suggests bleeding from the lower part of the small intestine, the large intestine or rectum. Possible causes are bowel infections, diverticulitis, inflammatory bowel disease (Crohn's disease or ulcerative colitis) and bowel cancer. All merit referral for investigation and treatment. Blood which drips from the anus after defaecation is common and is usually the result of haemorrhoids (piles). If not mixed in with the stools there is no need to refer straight away.	**
10.5	**Altered bowel habit lasting for over three weeks** in someone over 50 years of age	Most people have a predictable pattern of defaecation. If this pattern is broken for more than 3 weeks this may be a warning sign of inflammatory bowel disease or cancer. Consider referral in all people who develop this symptom	** *

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		over the age of 50 because of the high risk of bowel cancer in this age group.	
10.6	**Suspected dysentery or food poisoning** (any episode of diarrhoea and vomiting in which **food** is suspected as the origin or in which **blood appears in the stools**)	Dysentery is a result of a bacterial infection (shigellosis) and manifests in profuse watery diarrhoea, abdominal cramps and blood in the stools. Food poisoning is the consequence of eating food which is contaminated with infectious organisms, commonly a result of poor food hygiene together with insufficient cooking. Both are notifiable diseases*[4] and as such merit referral so that they can be reported by a medical practitioner. Campylobacter is another bacterial infection which can cause blood in the stools, but currently is not a notifiable disease.	**
10.7	**Signs of an inguinal hernia: Swelling in groin which is more pronounced on standing:** especially if uncomfortable.	In inguinal hernia is the result of a weakness in the abdominal wall in the region of the inguinal crease (the groin). The abdominal contents can bulge into a narrow necked passageway formed by this weakness and this can be very uncomfortable. An inguinal hernia carries a risk of being the site at which the loop of bowel can become obstructed and then there is a risk of strangulation of that portion of the bowel. The patient should be referred for a surgical assessment of the risk of complications. Refer as a high priority if a hernia has become acutely painful.	* **
10.8	**Anal discharge/ Soiling with stool (in underwear or**	Always refer for diagnosis if persistent and appearing in a previously continent	* **

4

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	bed):	child (could signify constipation with faecal overflow, a developmental problem of the bowel or emotional disturbance). An anal discharge may result from rectal or anal cancer and a faecal discharge may result from constipation with overflow of faecal fluid in an elderly person. Both situations require referral.	
10.9	**Painless lump felt in anus**	This could be a skin tag or anal warts, and possible may be an anal carcinoma. It needs referral for diagnosis if persistent for more than 2 weeks.	*
10.10	**Painful lump felt in anus**	This could be a prolapsed haemorrhoid (could be serious if the blood supply in pinched off), a perianal haematoma (benign) or an anal carcinoma. It needs referral for diagnosis if pain is severe.	** *
10.11	**Anal itch**	A short history of intense nocturnal anal itch might be the result of threadworm infection. A more prolonged history is most likely to be the result of haemorrhoids and skin tags. However it may be the result the more serious conditions of lichen sclerosus or anal carcinoma so should be referred for examination if not responding to treatment within 3 weeks.	*

11. RED FLAGS OF DISEASES OF THE BLOOD VESSELS

	Description	**Reasoning**	**Priority**
11.1	**Features of limb infarction** (suddenly extremely pale, painful, mottled and cold limb) If infarction is severe limb may feel more numb than painful.	Infarction results from the sudden obstruction of arterial blood supply to a limb, usually by blood clot. The patient requires urgent referral for surgical removal of the obstruction.	***
11.2	**Features of severely compromised circulation to the extremities:** pain in the calf which related to exercise and relieved by rest. Pain in calf in bed at night relieved by hanging leg out of bed (i.e. not cramp). Cold, purplish shiny skin. Areas of blackened skin (gangrene)	If obstruction to the arterial circulation is gradual and/or partial then pain will only appear when oxygen demands are higher than normal. Pain may appear on exercise and in bed, and there will be changes on the skin of the affected limb which suggest chronic (long standing) poor circulation. There is a high risk of infarction and also progressive gangrene which could lead to the necessity of amputation. These symptoms require referral for assessment, lifestyle advice (especially stop smoking) and consideration for vascular surgery.	** *

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11.3	**Features of an aortic aneurysm:** Pulsatile mass in abdomen greater than 5 cm in diameter. (Usually affects people over the age of 50 and is associated with the degenerative changes of atherosclerosis.)	The aorta is palpable in the abdomen as a pulsatile tube of about 2 cm in diameter. In the case of aneurysm the width of this tube increases, and a palpable width of greater than 5cm merits assessment by ultrasonography so that risk of rupture can be formally assessed. Early treatment of high risk cases is life saving. Refer urgently if abdominal pain or central back pain develops with a coexistent aortic aneurysm (see Table 11.4)	* unless pain develops; ***
11.4	**Features of a ruptured aortic aneurysm:** Acute abdominal or back pain with collapse. Features of shock may be coexistent. This is one of the manifestations of the **acute abdomen** (see Table 6)	A rupture of an aortic aneurysm is an emergency situation and the patient needs urgent surgical treatment. A rupture may be presaged by abdominal discomfort or back pain so if these symptoms develop in the presence of a suspected aneurysm refer as a matter of high priority/urgency.	***
11.5	**Features of meningococcal septicaemia:** acute onset of a purpuric rash, possibly accompanied by headache, vomiting and fever	The purpuric rash in meningococcal septicaemia is a result of vasculitis (inflammation of the blood vessels). This is a serious warning sign of a devastating disease process and the patient requires urgent referral for antibiotic treatment Meningococcal septicaemia is a notifiable disease*[5].	***

[5] **Notifiable diseases***

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11.6	**Features of severe consequences of varicose veins:** broken or itchy skin close to the veins indicate risk of varicose ulcer.	Varicose veins are usually benign, but can reduce the effectiveness of the drainage of blood from the affected area. This can result in weakened, dry and itchy (eczematous) skin. A break to the skin can easily develop into an ulcer and in this situation would merit referral for assessment and nursing care. Thrombophlebitis (inflammation of a length of a varicose vein) need not be referred if localized and superficial.	*
11.7	**Features of a deep vein thrombosis:** a hot swollen tender calf, can be accompanied by fever and malaise. Increased risk after air travel and surgery, and in pregnancy, cancer and if on oral contraceptive pill.	DVT develops slowly and needs to be distinguished from gastrocnemius strain (redness would be minimal and no fever) and thrombophlebitis (redness localized to the path of a varicose vein. If DVT is suspected, it merits high priority referral as without anticoagulant treatment there is a risk of pulmonary embolism (blood clot breaking off to lodge in the arterial circulation of the lungs). The patient should be advised to refrain from unnecessary exercise until they have been medically assessed.	**

12. RED FLAGS OF HYPERTENSION			
	Description	**Reasoning**	**Priority**
12.1	**Features of malignant hypertension:** diastolic hypertension >120mmHg with symptoms: including recently worsening headaches, blurred vision, chest	At a certain level hypertension leads to a negative cycle of increasing vascular damage and worsening hypertension. This is malignant hypertension and this carries a high risk of stroke and other cardiovascular events. Visual	*** **

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	pain.	disturbances and headaches are serious signs.	
12.2	**Seriously high hypertension** **Systolic** greater than or equal to **220 mmHg** **Diastolic** greater than or equal to **120mmHg** But no symptoms	Refer immediately; current medical guidelines[6] suggest that immediate medical management is required to prevent stroke or other cardiovascular events.	**
12.3	**Severe hypertension:** **Systolic** greater than or equal to **180 mmHg** **Diastolic** greater than or equal to **110mmHg**	Refer for treatment if not responding to your treatment in 2 weeks or straight away if major risk factors present[7]. Current medical guidelines[5] recommend medical treatment if there is no improvement in the blood pressure within 2 weeks.	*
12.4	**Moderate hypertension** **Systolic** greater than or equal to **160** and less than **180 mmHg** **Diastolic** greater than or equal to **100** and less than **110mmHg**	Refer for treatment if not responding to your treatment within 4 weeks or straight away for medical assessment if major risk factors present[7] Current medical guidelines[5]recommend medical management if not improving over 4-12 weeks and within 4 weeks if risk factors present. In people over the age of 80 year the threshold for treatment if no risk factors are present is less stringent: treatment is advised if blood pressure exceeds 160/90 mmHg, and has been sustained for 3-6 months.	*
12.5	**Mild hypertension** **Systolic** greater than or equal to **140** and less than **160 mmHg**	Refer for treatment if major risk factors present and if no improvement within 3 months. If no major risk factors present, only refer for treatment if you suspect	*

[6] Advice In this section is based on the chapter on cardiovascular diseases in the 2008 version of the British National Formulary (RSPG), and this takes into account the recommendations of the Joint British Societies (JBS2: British Societies' guidelines on prevention of cardiovascular disease in clinical practice. *Heart* 2005; **91** (Suppl V): v1–v52). Tables to calculate cardiovascular risk on the basis of risk factors can be found in this supplement.

[7] In this case **major risk factors** are features which are known to be associated with increased risk of a cardiovascular event in the presence of hypertension; these include **diabetes, past history of heart disease, chronic leg ischaemia** and **kidney disease**.
Medical doctors now use risk factor calculation tables to more accurately predict statistical risk in an individual case and this can help with decision making about whether or not medication is appropriate. Other **risk factors** such as sex, age, smoking status and lipid levels will be taken into account in such calculations. Medication is considered advisable in those for whom the 10 year risk of a cardiovascular event has been predicted as over 20%. For this reason referral is advised for risk assessment if any of the risk factors mentioned above are present or suspected to be present. Therefore, for example, if lipid levels are not known, referral should be considered. Risk calculation can help a patient make a more informed decision about the potential benefits of medication, and may also help them make the decision to adjust their lifestyle to improve their risk status.
In line with current medical wisdom, all patients with hypertension may benefit from advice on lifestyle changes to reduce blood pressure or cardiovascular risk; these include smoking cessation, weight reduction, reduction of excessive intake of alcohol, reduction of dietary salt, reduction of total and saturated fat, increasing exercise, and increasing fruit and vegetable intake.

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	Diastolic greater than or equal to **90** and less than **100**	cardiovascular risk is increased because of the presence of other risk factors such as smoking or hyperlipidaemia. In people over the age of 80 year the threshold for treatment if no risk factors are present is less stringent: treatment is advised if blood pressure exceeds 160/90 mmHg, and has been sustained for 3-6 months.	
12.6	**Hypertension of any level with diabetes** (see Table 27)	Always refer for medical management as the wisdom is that blood pressure should be maintained below 130/80 in people with diabetes because of the much greater risk of vascular and renal complications	** *
12.7	**Hypertension of any level with established kidney disease** (see Table 29)	Always refer for medical management as the wisdom is that blood pressure should be maintained below 130/80 in people with kidney disease because of the much greater risk of worsening kidney damage.	** *
12.8	**Hypertension of any level in pregnancy** (see Table 34)	Always refer because of the increased risk of pre-eclampsia and placental damage.	**

13 RED FLAGS OF ANGINA AND HEART ATTACK			
	Description	**Reasoning**	**Priority**
13.1	**Features of stable angina: central chest pain** related to **exertion, eating** or the **cold** and which **improves with rest**. Pain is **heavy, gripping** (rather than sharp or stabbing). It can **radiate down neck and arms** **Beware:** can present as episodes of **breathlessness/chest tightness** but **without pain** in the elderly.	Chest pain is a common anxiety symptom and also is a common feature of peptic ulcer disease, hiatus hernia and oesophagitis. Stable angina is distinguished from these syndromes by being predictably related to exertion, and generally develops in those over 35 years of age. It is far more likely to develop in older people and those with cardiovascular risk factors (see notes to Table 12) However if there is any doubt it is advisable to refer for assessment as angina carries a high risk of heart attack and other cardiovascular events.	** *
13.2	**Features of unstable angina or heart attack** **Sustained intense chest pain** associated with **fear or dread. Palpitations** and **breathlessness** may be	Very intense and heavy chest pain which tends to radiate to left shoulder and arm is suggestive of cardiac pain. If sustained, this is a situation in which there is a high risk of cardiac arrest or worsening cardiovascular damage. Keep	Consider aspirin treatment

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	present. The patient may **vomit** or develop a **cold sweat.** **Beware:** can present as **sudden onset of breathlessness, palpitations** or **confusion** but **without pain** in the elderly.	patient calm, upright and still whilst help arrives. Under Health and Safety Executive guidance, qualified first aiders are permitted to administer aspirin in the situation of suspected heart attack. There is very strong clinical evidence to support the benefits of aspirin in reducing the risk of fatal complications and this effect is more powerful the sooner the aspirin is given. The patient should be offered one 300mg tablet to be chewed or swallowed. It is contraindicated in children under the age of 12 years, in pregnancy, if the patient has a bleeding disorder or is on anticoagulant medication and in cases where there is a known allergy to aspirin or aspirin induced asthma. N.B. Chest pain is a common anxiety symptom and also is a common feature of peptic ulcer disease, hiatus hernia and oesophagitis. If associated with anxiety it is more likely to be centrally located and be sharp in quality.	ASAP ***
13.3	**Sudden onset tearing chest pain with radiation to back: features of shock may be present (faintness, low blood pressure, rapid pulse)**	This intense acute form of chest pain is suggestive of a dissecting aortic aneurysm. In this case urgent referral is required but aspirin should not be given, as it promotes bleeding.	***

14 RED FLAGS OF HEART FAILURE AND ARRHYTHMIAS			
	Description	**Reasoning**	**Priority**
14.1	**Features of mild chronic heart failure:** slight **swelling of ankles,** slight **breathlessness on exertion and when lying flat, cough** and with no **palpitations or chest pain.** **Dry cough** may be the only symptom in sedentary elderly people. **.**	Chronic heart failure refers to a condition in which the pumping ability of the heart is reduced and this results in accumulation of tissue fluid in the lungs (breathlessness) and ankles (oedema). It may remain undiagnosed if mild, but it is associated with increased risk of worsening damage to the heart. Current medical guidance[8] is that all patients will benefit in terms of symptoms and life expectancy from medical treatment of heart failure, and referral is recommended for assessment by electrocardiography and echocardiography.	*

[8] See National Institute of Clinical Excellence Guideline on medical management of Cardiac Failure; http://www.nice.org.uk/nicemedia/pdf/CG5NICEguideline.pdf (accessed 3/08)

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14.2	**Features of severe chronic heart failure: Marked swelling of ankles** and **lower legs, disabling breathlessness,** and **exhaustion.**	Severe chronic heart failure is a serious condition associated with a high mortality. It will benefit from medical management and this is associated with an improved life expectancy.	**
14.3	**Features of acute heart failure: Sudden onset of disabling breathlessness,** and **watery cough.**	Acute heart failure results from a sudden loss in the ability of the heart to pump effectively and most commonly results from heart attack, arrhythmia or valvular damage. The patient requires emergency treatment and needs to be kept calm and still until help arrives.	***
14.5	A pulse which is obviously **irregularly irregular (atrial fibrillation).**	An irregularly irregular (totally unpredictable) pulse is a feature of atrial fibrillation. This arrhythmia carries a risk of production of tiny blood clots within the chaotically contracting atria of the heart. These clots may then be dispersed (as emboli) to lodge in the circulation of the brain and so carry a risk of transient ischaemic attack and stroke. Refer as a high priority if features of heart failure or angina are also present, or if there is a history of blackouts or neurological symptoms	** *
14.6	A very rapid pulse of **140-250** per minute (**most likely to be supra-ventricular tachycardia or atrial fibrillation**)	Episodes of tachycardia (very rapid pulse) can be exhausting for the patient and may progress to a more serious arrhythmia or lead to the symptoms of acute heart failure. If the attack is not settling in five minutes then refer urgently for medical management. If the attack settles, then refer as a high priority so that the cause can be investigated	*** **
14.7	A very slow pulse of **40-50** per minute (**complete heart block**) which is either of recent onset or which is associated with features such as **dizziness, lightheadedness** or **fainting.**	Some healthy individuals have a naturally slow heart rate, particularly if they have trained as athletes. However if the rate suddenly drops to 40-50 per minute this is characteristic of an arrhythmia called complete heart block in which the natural pacemaker of the heart becomes unable to transmit a more frequent impulse to the ventricles. In this case the patient will start to feel dizzy and breathless and may pass out. Refer urgently if ongoing and as a high priority if the attack has settled down. The patient will need assessment for an	*** **

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		implanted pacemaker system.	
14.8	A pulse which is **regular** but which **skips beats at regular intervals** (i.e. one out of every 3 to 5 beats is missing) (incomplete **heart block**).	The occasional missed beat (ventricular ectopic) is not a worrying finding. It is more likely to occur in older people. However, If the beat is missed at a regular and frequent rate (more often than one in every five beats) this suggests a conduction defect called incomplete heart block and as this carries a risk of progression to a more serious arrhythmia it merits referral for cardiological assessment. If the patient is well and was unaware of the problem until you found it then you can refer non urgently.	*
14.9	**Unexplained falls or faints** in elderly person may be the result of an arrhythmia **("cardiac syncope")**	A temporary cardiac arrhythmia may result in a dizzy spell or sudden loss of consciousness from which an elderly person may recover very quickly. These episodes may accounts for unexplained falls. Consider referral if a patient reports a fall but can't remember how it happened.	** *
14.10	**Cardiac arrest:** collapse with no palpable pulse	Cardiac arrest results from the arrhythmia known as ventricular fibrillation. The most common cause is heart attack, but it also can occur spontaneously as a result of degenerative damage to the conducting system of the heart. It may also result from electric shock In contrast to atrial fibrillation, in which the heart continues to pump fairly efficiently, when the ventricles of the heart go into chaotic rhythm the pumping function of the heart is totally lost and there is immediate circulatory collapse. Once help has been called the patient requires urgent cardiopulmonary resuscitation from a qualified first aider.	***

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15. RED FLAGS OF PERICARDITIS			
	Description	**Reasoning**	**Priority**
15.1	**Features of uncomplicated pericarditis: sharp central chest pain** which is **worse on leaning forward and lying down**. Fever should be **slight** and pulse rate **no more than 100 per minute.** **Complications include:** * Features of **heart failure (breathlessness and oedema)** * Features of **arrhythmia (tachycardia)** * Symptoms of **heart attack/unstable angina**	Pericarditis can result from a viral infection, can occur as part of a complex metabolic illness such as renal failure, and also can complicate recovery from a heart attack. In its uncomplicated form the patient will have central chest pain which is affected by posture and other chest movements. If pericarditis is suspected it is advisable to refer for further cardiac investigations in hospital as the condition can deteriorate and affect the rhythm or pumping capacity of the heart. Refer urgently if complications are apparent.	**

16. RED FLAGS OF ANAEMIA			
	Description	**Reasoning**	**Priority**
16.1	**Features of long standing anaemia**: Any of the general symptoms of anaemia should be considered as a reason for referral so that serious treatable causes can be excluded. For example, **pallor, tiredness, breathlessness on exertion,** feeling of **faintness, depression, sore mouth** and **tongue.**	Anaemia is the term which refers to a reduced haemoglobin (the iron contain pigment which enables red blood cells to carry high concentrations of oxygen to the tissues) level in the blood. When haemoglobin levels are low, then the tissues experience relative oxygen lack. The cardiovascular system responds by increasing the heart rate and the respiratory rate increases. Iron stores in the body become low as iron is utilized to the maximum, and the tissue cells suffer, meaning that the person suffers malaise and sore mouth and tongue. Referral is important to establish the cause of the anaemia. Causes include increased blood loss (particularly from menstruation and bleeding from stomach or bowel, and prolonged use of aspirin or non steroidal anti inflammatory medication) , reduced production of blood in the marrow (due poor diet,	** *

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		malabsorption of iron, vitamin B12 or folic acid from the diet, and bone marrow disease) and chronic illness. Mild anaemia is common in pregnancy.	
16.2	**Features of severe anaemia:** The following suggest that the anaemia is very severe: **extreme tiredness and breathlessness on exertion, excessive bruising**, and **severe visual disturbances**. There may also be features of strain on the **cardiovascular system**: **Chest pain on exertion**, features of **tachycardia** and increasing **oedema**.	See above If the anaemia is severe this puts extra strain on the heart as it attempts to increase oxygen delivery to the tissues by increasing cardiac output. This can lead to cardiac failure and angina.	**
16.3	**Features of pernicious anaemia:** **Tiredness, lemony yellow pallor,** and gradual onset of **neurological symptoms (numbness, weakness**	Pernicious anaemia is a form of anaemia which results from an impaired ability to absorb Vitamin B12 from the digestive tract. The underlying cause is an autoimmune disease which affects the production of a protein called Intrinsic Factor from the stomach. Intrinsic factor needs to bind to vitamin B12 before the vitamin can be absorbed. As Vit B12 is also vital of the health of the nervous system, neurological symptoms can develop if deficiency is prolonged. Treatment involves regular and lifelong injections of vitamin B12.	** *

17. RED FLAGS OF HAEMORRHAGE AND SHOCK			
	Description	**Reasoning**	**Priority**
17.1	**Continuing blood loss**: Any situation in which significant bleeding is continuing for more than a few minutes without any signs of abating,	An adequate volume of blood in the circulation is essential to maintain the blood pressure required to enable adequate perfusion of the organs and tissues of the body. If the blood pressure drops too low the syndrome of shock develops which	***

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	except within the context of menstruation.	is defined as “a situation in which there is a failure of the circulatory system to maintain adequate perfusion of vital organs”. If bleeding is continuing unabated, and this is of particular concern if the bleeding is from an internal location, then the patient needs to be referred for fluid replacement and medical or surgical intervention to prevent further blood loss. Administer basic first aid to accessible bleeding sites whilst help arrives.	
17.2	**Features of severe blood loss leading to shock**: Refer if blood has been lost and the following symptoms and signs have been present **for more than a few minutes,** or are **worsening**: **Dizziness, fainting** and **confusion**. **Rapid pulse** of more than 100 per minute. **Blood pressure less than 90/60 mmHg**. **Cold and clammy** extremities.	If the symptoms of shock (see notes above) are developing this is an emergency situation. Administer basic first aid to bleeding sites. Ensure the patient is lying down and is kept warm as you wait for help to arrive.	***
17.3	**General symptoms of shock:** **Dizziness, fainting** and **confusion.** **Rapid pulse** or more than 100 per minute**. Blood pressure less than 90/60 mmHg. Cold** and **Clammy extremities.** Refer if these symptoms are **worsening** or **sustained** (more than a few seconds)	Shock can also result from an allergic reaction (anaphylactic shock), in the situation of overwhelming infection (endotoxic shock), in the situation of extreme dehydration (hypovolaemic shock), and failure for the heart to maintain an adequate circulation (cardiogenic shock resulting from damage to heart muscle, heart valves or from an arrhythmia). Sustained shock is always a situation in which treatment is required as an emergency as the vulnerable organs of the brain, kidneys and heart are at risk of damage from inadequate levels of oxygen and nutrients. A faint can produce a syndrome which is akin to shock, but the drop in blood pressure is always short lived and the person should start to recover within seconds. In the case of a faint the drop in blood pressure follows a sudden slowing of the heart rate, so a weak and slow pulse would be the norm in the few seconds following a faint, and this should return to a normal rate with 1-2 minutes. There is no need to refer in this situation.	*** unless faint is likely diagnosis (i.e. patient starts recovering within seconds of drop in blood pressure), then no need to refer.

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17.4	Additional symptoms of **anaphylactic shock: Widespread inflammatory response; warm extremities, puffy skin, difficulty breathing**	In anaphylactic shock the drop in blood pressure is a result of an extreme allergic reaction. In this case the collapse may be preceded by a hives-like swelling of the skin and worsening asthma. This is an emergency situation as the symptoms can worsen rapidly to a state of respiratory and circulatory collapse.	***

18. RED FLAGS OF LEUKAEMIA AND LYMPHOMA			
	Description	**Reasoning**	**Priority**
18.1	**Features of bone marrow failure:** Symptoms of progressive **anaemia** (See Table 16), recurrent progressive **infections,** progressive **easy bruising, purpura** and **bleeding.**	The bone marrow contains the stem cells for the three major cellular components of the blood, the red cells, platelets and white blood cells. Bone marrow can fail to produce healthy blood cells if infiltrated by cancer, damaged by medication (including cancer chemotherapy) or radiation, and sometimes as a result of an autoimmune disease. Bone marrow failure is a life threatening situation.	*** **
18.2	**Multiple enlarged lymph nodes** (greater than 1 centimetre in diameter) but painless, with no other obvious cause (i.e. known glandular fever infection).	Groups of lymph nodes can be found in the cervical region, in the armpits (axillary nodes) and in the inguinal creases (groin). In health lymph nodes are usually impalpable masses of soft tissue, but these can enlarge and become more palpable when the node is active in fighting an infection or if It is infiltrated by tumour cells. If a number of nodes are enlarged (to more than 1cm in diameter) this may signify a generalized infectious disease such as glandular fever. The other important cause of widespread lymph node enlargement (lymphadenopathy) is cancer, and in particular the cancers of the white blood cells, leukaemia and lymphoma. If multiple enlarged lymph nodes are found it is best to refer for a diagnosis and as a high priority if the patient is unwell.	** *
18.3	**A single markedly enlarged lymph node** (greater than 2 cm in diameter) with no other obvious cause.	Even in the situation of infection it is unusual for a lymph node to become grossly enlarged. Cancerous infiltration can lead to a firm enlarged lymph node which may be painless. This is particularly typical of lymphoma.	** *

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		Unexplained fever, weight loss and itching are other symptoms which together with lymph node enlargement are suggestive of lymphoma.	

19 RED FLAGS OF UPPER RESPIRATORY DISEASE			
	Description	**Reasoning**	**Priority**
19.1	**Features of progressive upper respiratory infection in susceptible people** (e.g. the frail **elderly** and the **immunocompromised** and people with **preexisting disease of the bronchi and bronchioles):** i.e. **cough and fever** or **new production of yellow/ green phlegm** each persisting for more than 3 days	In healthy people an upper respiratory infection (i.e. affects any part of the respiratory tract including and above the bronchi) may be protracted but is not necessarily a serious condition. In most cases, as long as there is no breathlessness it is safe to treat conservatively and there is no need for antibiotics. In healthy people consider referral if no response to your treatment within 1-2 weeks. However in the elderly and the immunocompromised (including those with chronic diseases such as cancer, kidney failure and AIDS) severe infections can be masked behind relatively minor symptoms and it is advisable to refer any respiratory condition which persists for more than 3 days. People with preexisting lung disease (e.g. asthma. chronic bronchitis, emphysema, lung cancer, cystic fibrosis) are at increased risk of progressive infection and similarly merit early referral.	**
19.2	**Features of progression of infection to the lower respiratory tract.** **Moderate to severe breathlessness**[9] with **malaise** suggests the involvement of the bronchi or lower air	Even in healthy people an infection which descends to below the bronchi is a more serious condition as the ability of the lungs to exchange the gases of carbon dioxide and oxygen will be compromised by the narrowing of the thin airways of the bronchioles and inflammation of the alveoli (air sacs).	*** **

[9] **Categorisation of respiratory rate in adults**
Normal respiratory rate in an adult: 10-20 breaths per minute (one breath is one inhalation and exhalation)
Moderate breathlessness in an adult: more than 30 breaths per minute
Severe breathlessness in an adult : more than 60 breaths per minute

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	passages. Usually accompanied by **cough** and **fever**, but may be the only symptom of an infection in the elderly or immunocompromised.	Breathlessness is a feature of lower respiratory tract narrowing or infection and should be taken seriously, especially in the elderly immunocompromised and those with pre-existing lung disease (such as asthma. chronic bronchitis, emphysema, lung cancer, cystic fibrosis). Respiratory rate of more than 30 respirations per minute is a marker of significant breathlessness Consider referral for medical diagnosis and possible antibiotic treatment	
19.3	**A single, grossly enlarged tonsil**: If the patient is unwell and feverish and has foul smelling breath this suggests **quinsy.**	Quinsy describes the development of an abscess in the tonsil. It carries a serious risk of obstruction of the airways and requires a same day surgical opinion. Refer urgently if the patient is experiencing any restriction in breathing (stridor may be heard)	*** **
19.4	**A single, grossly enlarged tonsil**: If patient appears well **lymphoma** is a possible diagnosis	If the patient appears well, you need to consider that a single enlarged tonsil in a young person very rarely results from a **lymphoma** and should be referred for exclusion of this diagnosis. However, grossly enlarged tonsils are not an uncommon finding in someone who has suffered from recurrent tonsillitis. In this case they are usually bilaterally enlarged.	*
19.5	**Stridor** (harsh noisy breathing heard on both the inbreath and outbreath)	Stridor is a noise which suggests upper airways obstruction. It is a serious warning sign if it develops suddenly. It suggests possible swelling of the air passages due to laryngotracheitis, quinsy or epiglottitis. If restriction to breathing is significant the patient with stridor will be sitting very still. It is important not to ask to see the tongue as this can affect the position of the epiglottis, and may	*** **

Categorisation of respiratory rate in children

The normal range for respiratory rate varies according to age in children

The following rates indicate **moderate to severe breathlessness**;

newborn (0-3 months)	>60 breaths per minute
infant (3m up to 2 years)	>50 breaths per minute
young child (2 years up to 8 years)	>40 breaths per minute
older child-adult	>30 breaths per minute

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		worsen the obstruction. Exposing the patient to steam (from a nearby kettle or running shower) can alleviate swelling whilst help arrives.	
19.6	Any new onset of **difficulty breathing** in a small child (less than 8 years of age) including unexplained blockage of nostril.	Always take a new onset of difficulty breathing of in a child seriously and refer for medical assessment to exclude serious disease. Possible common causes include lower respiratory infections, asthma, allergic reactions, inhalation of foreign bodies, and congenital heart disease.	*** **
19.7	An unexplained **persistent blockage of nostril on one side** in an adult (for more than 3 weeks).	One sided blockage of a nostril is unusual in benign conditions (such as nasal polyposis). It may be the presenting sign of a carcinoma of the nasopharynx. A one sided bloody discharge is a warning sign of this.	** *

20. RED FLAGS OF LOWER RESPIRATORY DISEASE			
	Description	**Reasoning**	**Priority**
20.1	**Features of progressive upper respiratory infection in susceptible people** (e.g. the frail **elderly** and the **immunocompromised** and people with **pre-existing disease of the bronchi and bronchioles):** i.e. **cough and fever** or **new production of yellow/ green phlegm** each persisting for more than 3 days	In healthy people an upper respiratory infection (i.e. affects any part of the respiratory tract including and above the bronchi) may be protracted but is not necessarily a serious condition. In most cases, as long as there is no breathlessness it is safe to treat conservatively and there is no need for antibiotics. In healthy people consider referral if no response to your treatment within 1-2 weeks. However in the elderly and the immunocompromised (including those with chronic diseases such as cancer, kidney failure and AIDS) severe infections can be masked behind relatively minor symptoms and it is advisable to refer any respiratory condition which persists for more than 3 days. People with preexisting lung disease (e.g. asthma. chronic bronchitis, emphysema, lung cancer, cystic fibrosis) are at increased risk of progressive infection and similarly merit early referral.	**
20.2	Any new onset of **difficulty breathing** in a small child	Always take a new onset of difficulty breathing of in a child seriously and refer for	*** **

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	(less than 8 years of age)	medical assessment to exclude serious disease. Common causes include lower respiratory infections, asthma, allergic reactions, inhalation of foreign bodies, and congenital heart disease.	
20.3	**Features of severe asthma:** At least two of the following**:** * **rapidly worsening breathlessness;** * **respirations greater than 30 per minute (or more if a child: see table below)**[10], * **heart rate greater than 110 per minute**, * **reluctance to talk** because of breathlessness, * **need to sit upright** and still to assist breathing. * **cyanosis** is a very serious sign .	Severe asthma is a potentially life threatening condition and may develop in someone who previously had no history of severe attacks. Urgent referral is required so that medical management of the attack can be instigated. Keep the patient as calm as possible whilst help arrives. Cyanosis describes the blue colouring which appears when the blood is poorly oxygenated. Unlike the blueness from cold which only affects the extremities, central cyanosis from poor oxygenation can be seen on the tongue. It may be very difficult to differentiate an asthma attack from the more benign situation of panic attack (characterised by a felt experience of intense fear, racing heart, increased depth of breathing, numbness and tingling of extremities, and mild muscular spasms), and it is possible for the two to coincide as an experience of breathlessness can trigger a panic reaction. In this situation the key feature is respiratory rate, and if this doesn't respond to calming measures within a few minutes, and rebreathing exhaled carbon dioxide (by breathing into a paper bag) within a minute or two then referral needs to be considered. Central	***

[10] **Categorisation of respiratory rate in adults**
Normal respiratory rate in an adult: 10-20 breaths per minute (one breath is one inhalation and exhalation)
Moderate breathlessness in an adult: more than 30 breaths per minute
Severe breathlessness in an adult : more than 60 breaths per minute

Categorisation of respiratory rate in children
The normal range for respiratory rate varies according to age in children
The following rates indicate **moderate to severe breathlessness**;

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		cyanosis would never be apparent in a panic attack, so if present this is an absolute indicator for urgent referral.	
20.4	**Features of infection of the alveoli (pneumonia):** Features include * **cough** * **fever** * **malaise** * **respirations greater than 30 per minute (or more if a child: see table below)**, * **heart rate greater than 110 per minute**, * **reluctance to talk** because of breathlessness, * **need to sit upright** and still to assist breathing. * **cyanosis** is a very serious sign .	Pneumonia means that inflammation (usually as a result of infection) has descended to the level of the air sacs (alveoli) in the lungs. As these sacs are involved in the exchange of gases, then breathlessness is always part of the picture of pneumonia. As the infection is so deep the patient can become extremely unwell and is may need hospital treatment. Use the severity of the symptoms to guide the urgency of the referral.	*** **
20.5	**Features of pleurisy**: **Localised chest pain** which is associated with inspiration and expiration. Refer if associated with fever and breathlessness, as this is an indication of associated pneumonia.	Pleurisy is the syndrome which results when a region of the pleural lining of the lungs becomes inflamed. This leads to a localized region of chest wall pain which worsens with coughing and breathing in. Pleurisy may be a complication of the spread of pneumonia to the periphery of a lung, in which case would be associated with malaise and breathlessness. It may appear without deeper lung damage and may result from a viral infection. It can also result from non-infectious causes, such as pulmonary embolism If there is no breathlessness there is no need for immediate referral.	if associated with breathless-ness **
20.6	Any episode of **coughing up** of more than a teaspoon of **blood (haemoptysis):**	Blood streaked sputum is a common and benign occurrence in upper respiratory tract infections, and is not a reason for referral if the infection is self limiting. A larger amount of fresh blood may herald more serious bleeding in those with bronchiectasis. Also it may be the first symptom of lung cancer or tuberculosis. Blood in the sputum also occurs in the case of pulmonary embolism.	**
20.7	Feature of **tuberculosis infection**: **chronic productive cough, weight loss, night sweats, blood in sputum** for	Tuberculosis is more common in people who have lived in countries where tuberculosis in endemic and in those who live in situations of poverty and in	**

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	more than 2 weeks.	overcrowded damp conditions. It can also develop in people who have close contact with those at high risk. Referral is for isolation, diagnosis and initiation of a prolonged programme of antibiotic therapy. Contacts will be traced and tested for infection if the diagnosis is confirmed. Tuberculosis is a notifiable disease*[11].	
20.8	**New onset of chronic cough** or **deep persistent chest pain in a smoker:**	The most common first symptom of lung cancer is chronic irritating cough which is different to the clearing of phlegm which characterises the smoker's cough. Rarely, lung cancer can cause deep persistent chest pain, but this is a less usual first symptom.	** *
20.9	**Unexplained hoarseness** lasting for more than 3 weeks: may be first symptom of **laryngeal** or **lung cancer** (particularly in smokers over the age of 50 years).	Prolonged hoarseness is usually benign in origin and may be diagnosed as "Chronic laryngitis" This painless syndrome is commonly the result of misuse or overuse of the vocal cords. However you need to consider the possibility of laryngeal cancer in smokers over the age of 50years. Lung cancer can also be a cause of hoarseness as the recurrent laryngeal nerve which passes deep in the chest can be damaged by an infiltrating tumour. Again smokers over the age of 50 years are a high risk group. Referral is advised to exclude these less likely possible causes of chronic hoarseness	*
20.10	**Features of pulmonary embolism:** Sudden onset of **pleurisy** with **breathlessness,**	Pulmonary embolism is the result of a lodging of a blood clot or multiple blood clots (emboli) in the arterial circulation supplying the lungs (pulmonary	***

[11] **Notifiable diseases***
Notification of a number of specified infectious diseases is required of doctors as a "statutory duty" under the Public Health (Infectious Diseases) 1988 Act and the Public Health (Control of Diseases) 1988 Act.
The Health Protection Agency (HPA) Centre for Infections collates details of each case of each disease that has been notified. This allows analyses of local and national trends.
This is one example of a situation in which there is a legal requirement for a doctor to breach patient confidentiality.
Diseases which are notifiable include:
Acute encephalitis, Acute poliomyelitis, Anthrax, Cholera, Diphtheria, Dysentery, Food poisoning, Leptospirosis, Malaria, Measles, Meningitis (bacterial and viral forms), Meningococcal septicaemia (without meningitis**),** Mumps, Ophthalmia neonatorum, Paratyphoid fever, Plague, Rabies, Relapsing fever, Rubella, Scarlet fever, Smallpox, Tetanus, **Tuberculosis**, Typhoid fever, Typhus fever, Viral haemorrhagic fever, Viral hepatitis (including hepatitis A, B and C), Whooping cough, Yellow fever

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	cyanosis, collapse.	circulation). If the blood clot is large there can be a sudden reduction of the oxygenation power of the lung and this can result in collapse and sudden death. In less severe cases the infarction of the lung tissue manifests as pleurisy with breathlessness, and blood may be coughed up in the sputum. This syndrome merits urgent referral for anticoagulation (thinning of the blood).	
20.11	**Features of sudden lung collapse (pneumothorax):** Onset of severe **breathlessness;** may be some **pleurisy and collapse** if very severe**.**	Pneumothorax can occur spontaneously, or may be provoked by a puncture of the lungs. It is notorious amongst acupuncturists as a possible complication of needling vulnerable points in the thorax, and practitioners should be vigilant that in extremely rare cases the symptoms can develop gradually up to 24 hours after a needle puncture.	***

21. RED FLAGS OF RAISED INTRACRANIAL PRESSURE			
	Description	**Reasoning**	**Priority**
21.1	**Features of a rapid increase in intracranial pressure**: A rapid **deterioration of consciousness** leading to **coma**. **Irregular breathing patterns** and **Pinpoint pupils** are a very serious sign.	An increase in the pressure within the skull seriously threatens the integrity of the structure of the brain. If the pressure rapidly increases (usually as a result of a sudden intracranial haemorrhage or bleeding from a fractured skull) there can follow downwards pressure via the soft tissue of the brain onto the brain stem. The brain stem is the seat of the basic vital functions such as breathing and maintenance of consciousness. As the brainstem is compressed the patient can lose consciousness and eventually will stop breathing. Constriction of the pupils is a result of compression of the nerve which leaves the brain at the level of the brain stem to supply the internal muscles of the eye. This is a grave warning sign of impending serious brain damage. Ensure patient is in a safe and warm place and ideally in the recovery position (unless neck trauma suspected) until help arrives.	***
21.2	**Features of a slow increase in intracranial pressure**: **Progressive headaches** and **vomiting** over the time-scale of a few weeks to months. The headaches are	Intracranial pressure will slowly increase if there is a gradual development of a “space occupying lesion” such as a brain tumour, abscess in the brain or accumulation of poorly draining cerebrospinal fluid. The pressure will be worse	**

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	worse in the morning and the vomiting may be **effortless**. **Blurring of vision** may be an additional symptom.	when the patient has been lying down and so the symptoms are characteristically worse in the morning. These include blurring of vision, "effortless vomiting" (i.e. not much preceding nausea) and headache.	

22. RED FLAGS OF BRAIN HAEMORRHAGE, STROKE AND BRAIN TUMOUR			
	Description	**Reasoning**	**Priority**
22.1	**Progressive decline in mental and social functioning**: Increasing difficulty in intellectual function, memory, concentration, and use of language.	Gradual loss of mental function can result from a range of slowly developing brain disorders including dementia, recurrent small strokes, extradural haemorrhage and slow growing brain tumour. Remember that in the elderly in particular depression can manifest in this way, and the symptoms may resolve with antidepressant medication.	*
22.2	**A temporary loss of brain function** (usually less than two hours long) such as **loss of consciousness, loss of vision**, **unsteadiness, confusion, loss of memory, loss of sensation or limb weakness**:	A temporary loss of brain function is most commonly seen as part of the syndrome of migraine, in which case it usually is part of a pattern with which the patient is familiar. In migraine the blood flow to a portion of the brain is temporarily reduced as a result of spasm of an artery. A simple migraine does not merit referral. The most common cause of loss of consciousness is a simple faint. This benign syndrome does not merit referral. It is characterised by a low blood pressure, slow but regular pulse and is triggered by prolonged standing, stuffy conditions and/or emotional arousal. A person who has fainted should start to recover almost immediately after the collapse. If these sort of symptoms occur for the first time, and are not obviously due to a faint, then it is important to exclude the more serious syndrome of transient ischaemic attack (TIA) in which a branch of a cerebral artery has been blocked by the temporary lodging of a small blood clot. TIA is a warning sign of the more permanent damage which results from stroke and the patient needs referral for diagnosis and treatment.	**

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22.3	**A persisting loss of brain function** such as **loss of consciousness, loss of vision, unsteadiness, confusion, loss of memory, loss of sensation** or **muscular weakness:**	Any development of symptoms which suggest a persisting loss in brain function merits referral to exclude stroke or a rapidly growing brain tumour. Some of these symptoms can also result from disease of the spinal cord (for example multiple sclerosis) or of a peripheral nerve (e.g. Bells Palsy)	*** **
22.4	**A loss of brain function which is progressive** over the course of days to weeks: This is more suggestive of a brain tumour rather than a stroke.	See above; progressive symptoms of loss of brain function are more suggestive of brain tumour than stroke.	**
22.5	**Features of a slow increase in intracranial pressure**: **Progressive headaches** and **vomiting** over the time-scale of a few weeks to months. The headaches are **worse in the morning** and the vomiting may be **effortless**. **Blurring of vision** may be an additional symptom.	Intracranial pressure will slowly increase if there is a gradual development of a "space occupying lesion" such as a brain tumour, abscess in the brain, extradural haemorrhage or accumulation of poorly draining cerebrospinal fluid. The pressure will be worse when the patient has been lying down and so the symptoms are characteristically worse in the morning. These include blurring of vision, "effortless vomiting" (i.e. not much preceding nausea) and headache.	**
22.6	**Features of a rapid increase in intracranial pressure**: A rapid **deterioration of consciousness** leading to **coma**. **Irregular breathing patterns** and **Pinpoint pupils** are a very serious sign.	An increase in the pressure within the skull seriously threatens the integrity of the structure of the brain. If the pressure rapidly increases (usually as a result of a sudden intracranial haemorrhage or bleeding from a fractured skull) there can follow downwards pressure via the soft tissue of the brain onto the brain stem. The brain stem is the seat of the basic vital functions such as breathing and maintenance of consciousness. As the brainstem is compressed the patient can lose consciousness and eventually will stop breathing. Constriction of the pupils is a result of compression of the nerve which leaves the brain at the level of the brain stem to supply the internal muscles of the eye. This is a grave warning sign of serious brain damage.	***

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23. RED FLAGS OF HEADACHE			
	Description	**Reasoning**	**Priority**
23.1	**Features of a slow increase in intracranial pressure**: **Progressive headaches** and **vomiting** over the time-scale of a few weeks to months. The headaches are **worse in the morning** and the vomiting may be **effortless**. **Blurring of vision** may be an additional symptom.	Intracranial pressure will slowly increase if there is a gradual development of a "space occupying lesion" such as a brain tumour, abscess in the brain, extradural haemorrhage or accumulation of poorly draining cerebrospinal fluid. The pressure will be worse when the patient has been lying down and so the symptoms are characteristically worse in the morning. These include blurring of vision (especially after coughing or leaning forward), "effortless vomiting" (i.e. not much preceding nausea) and headache.	**
23.2	**A sudden very severe headache which comes on out of the blue:** The patient **needs to lie down** and may **vomit**. There may be **neck stiffness** (reluctance to move the head) and **dislike of bright light**.	The sudden very severe headache (like a hit to the back of the head) is a cardinal symptom of the potentially devastating subarachnoid haemorrhage. This is a bleed from an area of weakness in one of the arterial branches which course round the base of the brain (The "circle of Willis"). Subarachnoid haemorrhage may result from an inherited malformation and so may develop out of the blue in a seemingly fit person.	***
23.3	**A severe headache which develops over the course of a few hours to days with fever**, together with either **vomiting** or **neck stiffness**. Suggests **acute meningitis** or **encephalitis**.	Meningitis and encephalitis are infections (of the meninges and brain tissue respectively) which can be caused by a wide range of infectious organisms. Although headache and fever are common co-symptoms in benign infections such as tonsillitis, the triad of headache, vomiting and fever is more suggestive of brain infections, and needs to be treated with caution. Additional symptoms such as reluctance to move the head, arching back of the neck and dislike of bright lights may also be present and if so are sinister signs. There may be a purpuric rash (see notes below), but the absence of a rash does not rule out the diagnosis.	***
23.4	**A severe headache which develops over the course of a few hours to days with fever and with a bruising and non-blanching rash**. Suggests **meningococcal meningitis**.	See notes above. In the form of meningitis caused by the meningococcus then there can be a serious form of pus producing infection of the meninges, a risk of septicaemia (and endotoxic shock; see Table 17) and the development of an irregularly distributed purpuric (like a shower of small bruises) rash.	***

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		This is an emergency situation.	
23.5	**A severe one sided headache over the temple occurring for the first time in an elderly person**.	One sided headaches are common and usually benign, but an unusual severe persistent one sided headache in an elderly person should be taken seriously as this could reflect the inflammatory condition of temporal arteritis. In this condition, which is a form of vasculitis, inflammation of the arteries supplying the head can become inflamed and thickened and this carries the risk of obstruction by blood clot. There is a significant risk of thrombosis of a cerebral (brain) artery or retinal artery in temporal arteritis and this is minimized by treatment with corticosteroid medication. Temporal arteritis is more likely to develop in people who have also been diagnosed with polymyalgia rheumatica (see Table 42).	**/***
23.6	**A long history of worsening (progressive) headaches,** with generalized symptoms such as **fever, loss of appetite and exhaustion.**	Recurrent headaches are common and are usually benign. They are often categorized by doctors as either migraine or tension headaches. Consider referral if there is a progression in severity of the headaches or if there are other symptoms not usually associated with benign headache such as fever, loss of appetite, weight loss or other neurological symptoms. Benign headaches should respond significantly to your treatment, so also consider referral of recurrent headaches if no improvement within 1-2 months.	*/**

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24. RED FLAGS OF DEMENTIA, EPILEPSY AND OTHER DISORDERS OF THE CENTRAL NERVOUS SYSTEM			
	Description	**Reasoning**	**Priority**
24.1	**Progressive decline in mental and social functioning**: Increasing difficulty in intellectual function, memory, concentration, and use of language.	Gradual loss of mental function could result from a range of slowly developing brain disorders including dementia, recurrent small strokes, extradural haemorrhage and slow growing brain tumour. Remember that in the elderly in particular depression can manifest in this way, and the symptoms may resolve with antidepressant medication.	*
24.2	Recent onset of confusion (i.e. evidence of an acute organic mental health disorder) e.g. ▪ **confusion,** ▪ **agitation** ▪ **visual hallucinations** ▪ **Loss of ability to care for self.**	Organic mental health disorders are by definition those which have a medically recognized physical cause, such as drug intoxication, brain damage or dementia. They are characterised by confusion or clouding of consciousness, and loss of insight. Visual hallucinations may be apparent, as in the case of delirium tremens (alcohol withdrawal). Referral has to be considered if you recognize that the patient or other people are at serious risk of harm if you do not disclose the patient's condition. As may be very difficult for you to fully assess this risk, it is advised that unless you are absolutely sure of the patient's safety, you should refer them to professionals who are experienced in the treatment of mental health disorders to do so. Referral in such a situation may result in the serious outcome of the patient being detained against their will in hospital under a section of the Mental Health Act. As this may be a situation in which you may need to breach patient confidentiality, you may wish to seek prior advice from the BAcC about how to proceed.	*** **
24.3	**A temporary loss of brain function** (usually less than two hours long) Features may include: ▪ **loss of consciousness** ▪ **loss of vision** ▪ **unsteadiness**	A temporary loss of brain function is most commonly seen as part of the syndrome of migraine, in which case it usually is part of a pattern with which the patient is familiar. In migraine the blood flow to a portion of the brain is temporarily reduced as a result of spasm of an artery. A simple migraine does not merit referral.	**

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	▪ **confusion** ▪ **loss of memory** ▪ **loss of sensation** ▪ **limb weakness**	The most common cause of loss of consciousness is a simple faint. This benign syndrome does not merit referral. It is characterised by a low blood pressure, slow but regular pulse and is triggered by prolonged standing, stuffy conditions and/or emotional arousal. A person who has fainted should start to recover almost immediately after the collapse. If these sorts of symptoms occur for the first time then it is important to exclude the more serious syndrome of transient ischaemic attack (TIA) in which a branch of a cerebral artery has been blocked by the temporary lodging of a small blood clot. TIA is a warning sign of the more permanent damage which results from stroke and the patient needs referral for diagnosis and treatment.	
24.4	**A persisting loss of brain function** (lasting more than 2 hours) Features may include: ▪ **loss of vision,** ▪ **unsteadiness** ▪ **confusion** ▪ **loss of memory,** ▪ **loss of sensation** ▪ **muscular weakness**	Any development of symptoms which suggest a persisting loss in brain function merits referral to exclude stroke or a rapidly growing brain tumour. Some of these symptoms can also result from disease of the spinal cord (for example multiple sclerosis) or of a peripheral nerve (e.g. Bells Palsy)	**
24.5	**A first ever epileptic seizure**: * **Generalised tonic clonic seizure: Convulsions**, **loss of consciousness, bitten tongue, emptying of bladder** and/or **bowels**. This is an emergency if the fit does not settle down within two minutes * **Generalised absence or complex partial seizures**: defined periods of **vagueness or loss of awareness or mood or personality changes.** * **Focal simple seizures**: Episodes of **coarse twitching of one part of the body.**	Anyone who may have experienced a first epileptic seizure needs to be referred for diagnosis and advice about driving and personal safety. The only symptom a patient might experience of nocturnal seizures might be a sensation of grogginess in the morning and a wet bed. In such a case the patient will have no memory of the episode of urination. The patient must be strongly urged not to drive until they have had medical advice. Absence and complex partial seizures may also be difficult to recognize; but are important to refer if suspected, as there is real risk of harm if an episode occurs when performing a risky activity such as climbing or driving. A first epileptic seizure may rarely result from a brain tumour. If a tonic clonic seizure is ongoing, and particularly if for more than 1 minute,	** Urgent if fit is ongoing ***

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		then this could develop into an emergency situation and help needs to be summoned with urgency. It is important to ensure the fitting patient is in the recovery position whilst you are waiting for help to arrive.	
24.6	**Epilepsy**: Refer any child who has suffered from a suspected **blank episode (absence)** or **seizure**	Epilepsy most commonly first presents in childhood, and is more common in children who have experienced febrile convulsions. Early diagnosis is important so that early management can help prevent deleterious effects on education and social development	
24.7	**Progressive coarse tremor appearing in mid to late life:**	A fine symmetrical tremor which is worse with anxiety and over arousal is common and benign, particularly in the elderly. In contrast Parkinson's disease presents with a progressive tremor which is far more coarse and which characteristically causes the movement of repeated opposition of thumb and fingers (the so called pill rolling tremor). Combined with this there will be increased stiffness of the muscles (the arms will be felt to resist passive movement). Parkinson's disease commonly affects one side more than another in its early stages. Commonly treatment is delayed for as long as is reasonable in Parkinson's disease, so there is no need for high priority referral.	*

25 RED FLAGS OF DISEASES OF THE SPINAL CORD AND PERIPHERAL NERVES			
	Description	**Reasoning**	**Priority**
25.1	**Any sudden or gradual onset of objectively quantifiable muscular weakness (for example weak grip, difficulty in standing from sitting)** **For Bell's palsy (facial muscular weakness) see 25.2.**	It is important to distinguish true muscular weakness from a perception of muscular weakness (a common complaint particularly in people who are depressed). In true muscular weakness there will be real limitation in performing simple day to day activities like brushing the teeth or walking. Asking the patient to move muscles against resistance is a simple way of gauging the strength of their muscles and is particularly effective in demonstrating if the weakness is not symmetrical (for example a one sided weakness of grip would be very clearly felt on resisted moves of the hands and	** * Urgent if Guillain Barre syndrome suspected ***

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		arms) Muscular weakness may result from conditions of the brain, spinal cord, peripheral nerves, the neuromuscular junction as well as the muscles themselves. As so many of these conditions are potentially serious, it is wise to refer all people with muscular weakness for a medical diagnosis. The rare condition of Guillain Barre syndrome can lead to a rapidly progressive weakness of the limbs. This would be accompanied by numbness of the hands and feet (it is a peripheral neuropathy). If the person is unable to walk then refer urgently as the condition rarely can progress to affect the breathing muscles.	
25.2	**Bells Palsy (facial weakness)**	Bells palsy is usually the result of a viral infection affecting the facial nerve. In this case the onset is dramatic, with facial paralysis developing over the course on 1-2 days. The person may be unable to move mouth, life eyebrows and importantly not be able to close eye on affected side. In rare cases it may be the result of more serious underlying conditions such as tumour, multiple sclerosis or Lyme disease. Bell's Palsy requires high priority referral as early treatment with antiviral and corticosteroid medication may improve the chances of full resolution of symptoms. Also the health of the cornea of the eye needs to be assessed regularly in the early stages (can be damaged if the lid is not able to fully closed)	** (high priority to access antiviral and steroid treatment as early as possible)
25.3	**Features of polymyalgia rheumatica**: Prolonged **pain and stiffness and weakness of the muscles** of the **hips and shoulders** associated with **malaise** and **depression**. Refer urgently if there is a sudden onset of a **severe one sided temporal headache** or **visual disturbances.**	Polymyalgia rheumatica is an inflammatory condition of the muscles of the shoulders and hips which predominantly afflicts people over the age of 50 years. Because it is inflammatory in nature there may be associated malaise, but the main symptoms are pain and weakness of the shoulder and hip muscles. Difficulty in standing from a sitting position is a classic sign of hip weakness. There is an increased risk of the serious condition of temporal arteritis and referral would enable the patient to make a decision to take the medical treatment of corticosteroids (see Table 23).	** * Urgent if severe one sided headache or visual disturbances ***
25.4	**Any sudden or gradual onset of unexplained measurable numbness or pins and needles (either**	Numbness can arise from problems in the brain, spinal cord and the peripheral nerves. All of these have potentially serious underlying causes, so if the cause is	** *

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	generalised or localised):	unclear then the patient and should be referred for a medical diagnosis. Vague numbness is a subjective complaint which is commonly described, but when tested the person can actually distinguish between different types of touch on the "numb" area. Measurable numbness here refers to the finding that there is the inability to feel or distinguish between the pain of a pin-prick and the touch of a piece of cotton wool. The most common cause of measurable numbness however is compression of nerve roots in either the neck or sacral region as a result of osteoarthritis of the spine and sacrum and increased muscular spasm (for example in piriformis syndrome). These are benign causes of numbness and are distinguished by having a one sided distribution on either the side of an arm and hand or down the back of the leg (this is sciatica). In this case, if your diagnosis is correct then treatment (with acupuncture and massage and specific muscle stretching exercises) should relieve the numbness as the muscular tension resolves. Refer if no improvement in one week.	
25.5	**Cauda equina syndrome:** numbness of buttocks and perineum **(saddle anaesthesia)** with **bilateral numbness or sciatica** in legs**. Difficulties in urination or defaecation are** serious symptoms**.**	The cauda equina (horse's tail) is the bunch of nerves which descend from the bottom of the spinal cord from the level of L1-2 downwards. These nerve roots supply sensation and motor impulses to the perineum, buttocks, groin and legs. Cauda equina syndrome suggests the compression of a number of these roots (usually from a central prolapsed disc, but possibly from tumour or other spinal growth). This is a serious situation as prolonged compression to the perineal supply can lead to permanent problems with urination, defaecation and sexual function. Refer as a high priority.	**
25.6	**The features of early shingles**: Intense one sided pain, with overlying rash of crops of fluid filled reddened and crusting blisters. The pain and rash correspond in location to a neurological dermatome. The pain may precede the rash by 1-2 days.	Shingles is an outbreak of the chicken pox virus (Varicella zoster) which has lain dormant within a spinal nerve root ever since an earlier episode of chicken pox. It tends to reactivate when the person is run down, exposed to intense sunlight and in the elderly. Warn the patient that the condition is contagious and advise that immediate treatment with the antiviral drug Acyclovir has been proven to reduce the severity	High priority (to access antiviral treatment as early as possible)

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		of prolonged pain after recovery of the rash (in this way you are allowing the patient the opportunity of making an informed decision about choosing conventional treatment).	**
25.7	**Trigeminal neuralgia (and other forms of one sided facial pain).** Lancinating pain on one side of the face, which radiates out from a focal point in response to defined triggers. May be associated with twitching ("tic doloroux")	Trigeminal neuralgia is excruciating facial pain, often triggered by light touch or wind, which radiates from a defined point in a predictable distribution on one side of the face. The common (and "benign") form may be the result of pressure on the trigeminal nerve within the skull by a blood vessel, but rarely is the result of something more serious such as a brain tumour or multiple sclerosis. For this reason a person with unexplained facial pain should be referred for full investigation. Microsurgical treatments have recently been found to have success in intractable cases Acupuncture is recognised by medics to be a reasonable pain relief option for this debilitating condition.	*

26 WARNING FEATURES OF DISEASES OF THE THYROID GLAND

	Description	Reasoning	Priority
26.1	**Goitre:** Refer only if symptoms of hyperthyroidism or hypothyroidism are present (see below), or if goitre is tender, irregular or noticeably enlarging.	A goitre is an enlarged thyroid gland. It can be felt and seen in the lower half of the neck where it tends to fill the hollow which lies over the trachea and above the manubrium. A small symmetrical goitre is a not uncommon finding in women, particularly in puberty and pregnancy, and if no symptoms are associated, need not be a cause for referral in itself.	*
26.2	Features of **hypothyroidism** (these tend to be progressive over the course of a few months)**;** Symptoms: **tiredness, depression, weight gain, heavy periods, constipation** and **cold intolerance** Signs: **Dry puffy skin, dry and thin hair, slow pulse**	The symptoms of hypothyroidism (underactive thyroid) overlap with those of depression and a simple blood test can differentiate between the two syndromes. If prolonged, the state of hypothyroidism can have significant deleterious metabolic consequences and medical replacement therapy is advised if it is not responding to your treatment.	*
26.3	Features of **hyperthyroidism (**these tend to be progressive over the course of a few months): Symptoms: **Irritability, anxiety, sleeplessness,**	The symptoms of hyperthyroidism overlap with those of an anxiety disorder, and a simple blood test can differentiate between the two syndromes. If prolonged, hyperthyroidism can have a significant impact on the cardiovascular system, and	** *

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	increased appetite, loose stools, weight loss, scanty periods and **heat intolerance**. Signs: **Sweaty skin, tremor of the hands, staring eyes and rapid pulse**	medical treatment is advised if not responding to your treatment. High priority referral may be indicated patient is very agitated, or if cardiac symptoms (chest pain, palpitations or breathlessness) are present.	

27 RED FLAGS OF DIABETES MELLITUS			
	Description	**Reasoning**	**Priority**
27.1	**Confusion / coma** with **dehydration (hyperglycaemia)**	These are serious symptoms of uncontrolled diabetes (when levels of glucose in the blood become too high) and are urgent red flags in their own right. If the patient is losing consciousness, ensure they are kept in a safe place in the recovery position until help arrives.	***
27.2	**Hypoglycaemia** (due to effects of insulin or antidiabetic medication in excess of bodily requirements): **Agitation, sweating, dilated pupils confusion and coma**	Confusion / coma can also be the consequence of a hypoglycaemic attack (a result of an excessive reaction to insulin or anti-diabetic medication). This can be helped by urgent administration of glucose is a readily absorbable form (such as a glucose drink). If in doubt about the cause of the confusion in a diabetic, it is always appropriate to give glucose as it is safe to do this whatever the cause. If the patient is losing consciousness, ensure they are kept in a safe place in the recovery position until help arrives.	***
27.3	**Type I diabetes or poorly controlled Type II diabetes:** Short history of **thirst, weight loss** and **excessive urination** which is rapidly progressive in severity.	Thirst and excessive urination are due to the osmotic effect of glucose in the urine. Weight loss because the tissues are unable to utilize the glucose in the situation of insulin lack. The patient is at high risk of coma because of rising levels of lactic acid. Refer as a high priority and urgently if any signs of clouding of consciousness.	*** **
272.4	**Type II diabetes:** General feeling of **unwellness with thirst** and **increased need to urinate large amounts of urine** which develop over the course of **weeks to**	In Type II diabetes the onset is more gradual and the situation is less urgent. Sustained levels of hyperglycaemia put the patient at increased risk of heart disease, kidney disease, vascular disease and chronic infections.	** *

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	months.		
27.5	**Increased tendency to infections** such as **cystitis, boils** and **oral thrush (candidiasis).**	Increased tendency to purulent, urinary and skin infections may indicate underlying type II diabetes	*
27.6	**Poor wound healing,** especially in feet and legs	Increased tendency poor wound healing may indicate underlying type II diabetes	** *

28 RED FLAGS OF OTHER ENDOCRINE DISEASE			
	Description	**Reasoning**	**Priority**
28.1	**Features of Cushing's syndrome:** Weight gain, weakness and wasting of limb muscles, stretch marks and bruises. Mood changes, hypertension, red cheeks, acne	Cushing's syndrome is due to chronically raised levels of corticosteroids and may result from medical treatment or from excessive bodily production. It carries serious health consequences in terms of increasing the risk of high blood pressure and diabetes and osteoporosis. Refer if cause is unknown.	*
28.2	**Features of Addison's disease:** Increased pigmentation of skin, weight loss, muscle wasting, tiredness, loss of libido, low blood pressure, diarrhoea and vomiting, confusion, collapse with dehydration	Addison's disease is due to lack of bodily corticosteroid, and the symptoms may develop gradually or may result in a sudden collapse. The syndrome can also result from a sudden withdrawal from high doses of prescribed corticosteroid. In both cases the situation is a medical emergency.	*** **
28.3	**Features of the growth of a pituitary tumour:** Progressive headaches, visual disturbance and double vision	The pituitary gland is situated at the base of the brain in the region of the crossing of the optic nerves and the passage of the cranial nerve which supplies the eye muscle. A tumour of the pituitary gland may cause early visual disturbance and double vision.	** *
28.4	**Features of hypopituitarism:** Loss of libido, infertility, menstrual disturbances, tiredness, low blood pressure, inappropriate lactation.	The pituitary is the source of the endocrine hormones which regulate growth, metabolism and the reproductive system. Damage to the pituitary gland can result in a complicated pattern of endocrine disturbance.	** *
28.5	**Features of hyperprolactinaemia:** Inappropriate secretion of milk and infertility	Prolactin may be secreted in excess in all forms of pituitary disease, and so is a red flag for pituitary tumour.	*
28.6	**Features of acromegaly (growth hormone excess)** Change in facial appearance (coarsening of features),	Acromegaly commonly results from a pituitary tumour and so symptoms of pituitary tumour growth (see Table 22) may be present also.	** *

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	increased size of hands and feet, enlarging tongue, deepening voice, joint pains, and if advanced, hypertension and breathlessness		

29. RED FLAGS OF DISEASES OF THE KIDNEYS			
	Description	**Reasoning**	**Priority**
29.1	**Blood in the urine:** Refer **all cases in** men Refer in women except in the case of **acute urinary infection.**	The most common and benign cause of blood in the urine is bladder infection (cystitis) in women. If the symptoms are suggestive of this diagnosis; (burning on urination, low abdominal pain, cloudy or blood stained urine) then no need to refer straight away. Treat with acupuncture, recommend a high fluid intake and only refer if not settling within 3 days. However blood in the urine is not normal in men who should be protected from infection by their relatively long urethras. Refer all cases of blood in the urine in men and in women if there are either no other symptoms (blood may be coming from kidney or from tumour) or if the pain is felt also in the loin (suggesting spread of infection to kidneys)	*/**
29.2	**Unexplained oedema (excess tissue fluid,** manifesting primarily as **ankle swelling** extending to more than 2cm above the malleoli):	Oedema means excess tissue fluid and tends to manifest in the lower regions of the body, first appearing as ankle swelling. Mild ankle swelling can develop as a result of inactivity and overheating, but should never extend to more than a couple of centimeters above the malleoli. If the oedema is severe it may affect the lower part of the calf and also can accumulate in the scrotum, buttocks and lower abdominal tissue. If the oedema is due to excess tissue fluid then it will tend to “pit” meaning that sustained pressure will leave an indentation in the skin. Oedema can have a range of causes, and most of these, including kidney disease and chronic heart failure (see Table 14), are potentially serious. If the patient is accumulating significant oedema (more than mild ankle swelling) they should be referred for investigation of the cause.	**

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29.3	**Acute loin pain:** often comes in waves**; patient may vomit** and **collapse**	This is characteristic of an obstructed kidney stone. The pain may radiate round to the suprapubic region particularly if the stone moves some way down the ureter. Encourage drinking of fluids.	***
29.4	**Persistent loin pain:** (i.e. pain in the flanks either side of the spine between the levels of T11 and L3).	Persistent achy pain (for longer than one week) in one or both loins might be an indication of kidney disease. It would be wise to refer if there is no obvious muscular explanation. Refer as high priority if coexistent with symptoms of urine or generalized infection (fever and cloudy urine)	**
29.5	**Features of acute pyelonephritis**: Fever, malaise, loin pain and cloudy urine suggest an infection of the kidneys.	Whilst bladder infections are usually self limiting, particularly in women, if there are features that the infection has ascended the ureters to affect the kidney, then this is a more serious situation. Acute pyelonephritis carries a risk of permanent scarring of the kidneys and merits medical attention (treatment with antibiotics).	**
29.6	**Features of vesico-ureteric reflux disease (VUR) in a child**: Any history of recurrent episodes or a current episode of **cloudy urine** or **burning on urination** should be taken seriously in a **prepubescent child**.	Urine infections are common in young children but need to be taken seriously, particularly if there is a history of recurrent infections. The small child is more vulnerable to vesico-ureteric reflux (VUR) which means that when the bladder contracts some urine is flushed back towards the kidneys. In the case of infection of the bladder, then VUR can lead to infectious organisms causing damage to the delicate structure of the kidney. Sometimes this damage occurs with very few symptoms, but if cumulative and undetected can lead to serious kidney problems and high blood pressure in later life. For this reason it is wise to refer all prepubescent children with a history of symptoms of urinary infections to exclude the possibility of VUR.	Non urgent if no symptoms * High priority if current symptoms **

30. RED FLAGS OF DISEASES OF THE URETERS, BLADDER AND URETHRA

	Description	Reasoning	Priority
30.1	**Acute loin pain:** often comes in waves**; patient may vomit** and **collapse**	This is characteristic of an obstructed kidney stone. The pain may radiate round to the suprapubic region particularly if the stone moves some way down the ureter. Encourage drinking of fluids.	***
30.2	**Blood in the urine (haematuria) or sperm**	The most common and benign cause of blood in the urine is bladder infection	** *

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	(haemospermia): Refer **all cases in** men Refer in women except in the case of **acute urinary infection.**	(cystitis) in women. If the symptoms are suggestive of this diagnosis; (burning on urination, low abdominal pain, cloudy or blood stained urine) then no need to refer straight away. Treat with acupuncture, recommend a high fluid intake and only refer if not settling within 3 days. However blood in the urine is not normal in men who should be protected from infection by their relatively long urethras. Refer all cases of blood in the urine in men and in women if there are either no other symptoms (blood may be coming from kidney or from tumour) or if the pain is felt also in the loin (suggesting spread of infection to kidneys). Haemospermia is alarming to the patient but usually benign as it can result from slight trauma to the genitals. Nevertheless refer to exclude a serious cause.	
30.3	**Features of recurrent or persistent urinary tract infection:** Episodes of symptoms including some or all of **cloudy urine, burning on urination, abdominal discomfort, blood in urine** and **fever** especially if occurring in **men**	Urinary tract infections are generally self limiting and should clear up within 5 days. Refer anyone who has persistent symptoms to exclude an underlying disorder of the urinary system. Recurrent or persistent infections are particularly uncommon in men and are more likely to signify an underlying disorder of the urinary tract than when they occur in women.	** *
30.4	Features of a **urinary tract infection** in someone in one of the following **vulnerable groups:** * **preexisting disorder of the urinary system** * **diabetes** * **pregnancy**	Refer someone who develops symptoms of a urinary tract infection straightaway for treatment if there is an underlying vulnerability such as known disease of the urinary system (e.g. kidney disease, kidney stones, bladder cancer and enlarged prostate gland) diabetes or pregnancy. In both pregnancy and diabetes there is a far higher risk of the infection ascending the ureters and damaging the kidneys. Urinary infections may also increase the risk of early labour or miscarriage.	**
30.5	Features of **moderate prostatic obstruction** Enlargement of the prostate gland leads to symptoms such as increasing **difficulty urinating,** need to get up at night to urinate **(nocturia).**	Benign prostatic enlargement is common and the symptoms can respond to acupuncture treatment. However, the same symptoms can be caused by a prostatic tumour, and so it is wise to refer for further investigations, including physical (rectal) examination, kidney function tests and a blood test for prostate specific antigen (PSA).	*

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30.6	**Features of acute pyelonephritis**: Fever, malaise, loin pain and cloudy urine suggest an infection of the kidneys.	Whilst bladder infections are usually self limiting, particularly in women, if there are features that the infection has ascended the ureters to affect the kidney, then this is a more serious situation. Acute pyelonephritis carries a risk of permanent scarring of the kidneys and merits medical attention (treatment with antibiotics).	**
30.7	**Features of vesico-ureteric reflux disease (VUR) in a child**: Any history of recurrent episodes or a current episode of **cloudy urine** or **burning on urination** should be taken seriously in a **prepubescent child**.	Urine infections are common in young children but need to be taken seriously, particularly if there is a history of recurrent infections. The small child is more vulnerable to vesico-ureteric reflux (VUR) which means that when the bladder contracts some urine is flushed back towards the kidneys. In the case of infection of the bladder, then VUR can lead to infectious organisms causing damage to the delicate structure of the kidney. Sometimes this damage occurs with very few symptoms, but if cumulative and undetected can lead to serious kidney problems and high blood pressure in later life. For this reason it is wise to refer all prepubescent children with a history of symptoms of urinary infections to exclude the possibility of VUR.	Non urgent if no symptoms * High priority if current symptoms **
30.8	**Bedwetting in a child:** if persisting over the age of 5 years.	Consider referral if the child is over 5 years of age, so that physical causes can be excluded and so parents can have access to expert advice.	*
30.9	**Incontinence:** if unexplained or causing distress	A mild degree of stress incontinence (leakage of a small amount of urine when coughing or laughing) is common and benign in women particularly after childbirth and the menopause. However, uncontrollable losses of large amounts of urine are not normal, nor is bedwetting when asleep. In these cases investigations are merited to look for treatable causes such as prolapsed uterus, prostatic obstruction and nocturnal seizures). Also refer so that the patient can have access to guidance and support from an incontinence specialist nurse.	*

31 RED FLAGS OF MENSTRUATION			
	Description	**Reasoning**	**Priority**

Key to priority rating: *	refer non urgently (ensure patient is seen within the week)
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***	refer urgently (call 999/speak to on call doctor asap)

31.1	**Primary amenorrhoea:** after age of 17	Refer any girl for investigation who has not achieved first menstruation by the age of 17.	*
31.2	**Secondary amenorrhoea:** for more than 12 months	refer if there have been **no periods for 12 months**, or sooner if you believe there is a treatable cause (such as hyperthyroidism).	*
31.3	**Menorrhagia:** with features of **severe anaemia** (tiredness, breathlessness, palpitations on exertion).	Menorrhagia (heavy periods) can be the sole cause of significant anaemia, and merits prompt referral for investigation and treatment of the cause	**
31.4	**Metrorrhagia:** bleeding between periods which has no regular pattern. This includes post coital bleeding (bleeding after intercourse).	Irregular periods are common, but bleeding which seems to fall outside the normal confines of a 2-5 day menstrual bleed might rarely signify a uterine or cervical tumour. Refer for further investigation if this happens on more than 3 occasions.	*
31.5	**Post menopausal bleeding:** any unexplained bleeding after the menopause	Predictable bleeding after the menopause is normal with HRT preparations. Otherwise it is a red flag for uterine or cervical tumour. Refer for further investigation.	** *
31.6	**Vaginal discharge:** after menopause	Vaginal discharge is not normal after the menopause, particularly if offensive or blood stained. Refer to exclude infection or carcinoma.	*
31.6	**Vaginal discharge:** before puberty	Vaginal discharge is not normal before puberty, particularly if offensive or blood stained. Consider possibility of abuse. (see 44.34). Always refer for further investigation/ treatment of infection.	**
31.7	**Vaginal itch (if prolonged)**	Vaginal itch is a common side effect of thrush (candidiasis) and sensitivity to soaps and bath products so refer only if prolonged for more than 1 week and not responding to advice and treatment. Consider the possibility of atrophic vaginitis is post menopausal women. This can respond to hormone creams. Also rarely can develop in lichen sclerosus and vulval cancer. Consider the possibility of abuse in children (see 44.33). Refer for investigation.	*

32 RED FLAGS OF SEXUALLY TRANSMITTED DISEASE			
	Description	**Reasoning**	**Priority**

Key to priority rating: *	refer non urgently (ensure patient is seen within the week)
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32.1	**Vaginal discharge:** if irregular, blood stained or unusual smell	A slight creamy Vaginal discharge is usual, and tends to increase and become more elastic around the time of ovulation. An increase of this sort of discharge is normal in pregnancy. If an irregular pattern of blood staining, volume, itchiness or smell develops investigation is merited to exclude sexually transmitted disease (STD). This is or particular importance in pregnancy as some STDs can threaten the health of the fetus. If STD[12] suspected advise patient to visit local genitourinary department (STD clinic) as first port of call (rather than GP). Thrush (candidiasis) does not necessarily merit referral as it can subside by means of conservative measures and is not usually considered to be contagious. If recurrent and troublesome consider referral to investigate possible underlying cause such as diabetes or immune deficiency.	** *
32.2	**Vaginal discharge:** after menopause	Vaginal discharge is not normal after the menopause, particularly if offensive or blood stained. Refer to exclude infection or carcinoma.	*
32.3	**Vaginal discharge:** before puberty	Vaginal discharge is not normal before puberty, particularly if offensive or blood stained. Consider possibility of abuse. (see 44.33). Always refer for further investigation/ treatment of infection.	**
32.4	**Discharge from penis:**	Always refer as may indicate sexually transmitted disease. If STD suspected advise patient to visit local genitourinary department as first port of call (rather than GP).	
32.5	**Sores, warty lumps or ulcers** on vagina or penis	These are very likely to be STD and rarely may be cancer. Refer to STD clinic or GP for investigation.	** *
32.6	**Pelvic inflammatory disease (PID) (chronic form):** vaginal discharge, gripy abdominal pain, pain on	Chronic PID poses a threat to fertility and may suggest the person is carrying a sexually transmitted disease. If STD suspected advise patient to visit local	** *

[12] If you suspect an STD, it is worth discussing with your patient the issue of attending an appointment at the GU clinic, so that a proper diagnosis can be made and advice can be given about safe sex, and prevention of spread of the condition. Remind your patient that such a visit will be held in strict confidence by the clinic, and will not be recorded in the G.P. notes.

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	intercourse, dysmenorrhoea, infertility	genitourinary department as first port of call (rather than GP).	
32.7	**Pelvic inflammatory disease (PID) (acute form):** Low abdominal pain with collapse, fever	Acute PID poses a serious risk to fertility. Refer urgently for antibiotic treatment.	***
32.9	**Outbreak of genital herpes** in last trimester of pregnancy	Refer as risk of transmission of herpes virus to baby during delivery.	*
32.9	**Offensive fishy watery discharge** (possible bacterial vaginosis) in pregnancy	Refer for treatment as bacterial vaginosis leads to increased risk of early labour and miscarriage.	**

33 RED FLAGS OF STRUCTURAL DISORDERS OF THE REPRODUCTIVE SYSTEM

	Description	Reasoning	Priority
33.1	**Primary amenorrhoea:** after age of 17	Refer any woman for investigation who has not achieved first menstruation by the age of 17. If secondary sexual characteristics are developing normally, this might suggest an imperforate hymen or, rarely, an intersex disorder.	*
33.2	**Menorrhagia:** with features of **severe anaemia** (tiredness, breathlessness, palpitations on exertion).	Menorrhagia (heavy periods) can be the sole cause of significant anaemia, and merits prompt referral for investigation and treatment of the cause Menorrhagia may result from fibroids, endometriosis or an ovarian cyst.	**
33.3	**Post menopausal bleeding:** any unexplained bleeding after the menopause	Predictable bleeding after the menopause is normal with HRT preparations. Otherwise it is a red flag for uterine or cervical tumour. Refer for further investigation.	** *
33.4	**Metrorrhagia:** bleeding between periods which has no regular pattern. This includes post coital bleeding (bleeding after intercourse).	Irregular periods are common, but bleeding which seems to fall outside the normal confines of a 2-5 day menstrual bleed might rarely signify a uterine or cervical tumour. Refer for further investigation if this happens on more than 3 occasions.	*
33.5	**Pelvic pain** or **deep pain during intercourse**	Refer if not responding to your treatment (may suggest pelvic inflammatory disease, but also endometriosis, fibroids, or ovarian cysts).	** *
33.6	**Abdominal swelling: discrete mass** in suprapubic or inguinal regions	Refer if a **mass** is felt (possible fibroids, ovarian cyst, tumour, pregnancy).	*

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33.7	**Abdominal swelling: generalised**	Refer if the swelling is **diffuse** and increasing over days to weeks (may be fluid accumulation from a tumour (ascites). If the patient is lying on their back, an abdomen with accumulated fluid will be dull to percussion in the flanks and resonant in the central region only.	*
33.7	**Vulval itch or vaginal discharge** in post menopausal women	Refer if these occur in a post menopausal women (usually benign, but may result from cancer of the vulva, cervix or endometrium).	*
33.8	**Lump in vulva**	This is usually benign (Bartholin's or sebaceous cyst) but refer to exclude vulval carcinoma or warts.	*
33.9	**Lump in testicle/scrotum**	Most scrotal lumps are benign, especially (varicocoele sebaceous cyst), but rarely can be testicular cancer. Refer for further investigation.	*
33.10	Acute or chronic **testicular pain:** radiates to groin, scrotum or low abdomen	Refer any sudden onset of severe testicular pain (radiates to groin, scrotum or low abdomen). This could signify inflammation of the testicle (orchitis) or a twist of the testicle (torsion). If the pain is very intense (with collapse and vomiting) refer as emergency.	*** **
33.11	Chronic dull **testicular pain:** radiates to groin, scrotum or low abdomen	If the testicular pain is more of a long lived discomfort, this could either be chronic epididymitis or varicocoele and merits a medical examination and further tests.	*
33.12	**Precocious puberty:** secondary sexual characteristics before the age of 8 years in girls and 9 years on boys.	Refer if secondary sexual characteristics begin to appear before the age of 8 years in girls and 9 years in boys so that an endocrine cause can be excluded.	*
33.13	**Delayed puberty:** secondary sexual characteristics not apparent by the age of 15 in girls and 16 in boys.	Refer if secondary sexual characteristics have not started to appear by the age of 15 years in girls and 16 years in boys. Refer if menstruation has not begun by the time of a girl's 17th birthday (**primary amenorrhoea**).	*

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34 RED FLAGS OF PREGNANCY			
	Description	**Reasoning**	**Priority**
34.1	**Bleeding: any episode of vaginal bleeding in pregnancy**	Refer all cases for investigation on the same day. **Slight painless bleeding** occurring at 4, 8, or 12 weeks of gestation, is most likely to be physiological (i.e. benign) in nature, but refer to exclude miscarriage. Painless or painful bleeding at a later stage in pregnancy may result from placenta praevia or placental abruption, both of which seriously threaten the health of the fetus and the mother. Refer as emergency if any signs of shock are apparent (low blood pressure, fainting, rapid pulse) as internal bleeding may not become immediately apparent.	*** **
34.2	**Abdominal pain: any episode of sustained abdominal pain in pregnancy**	Gripy abdominal pains (like mild period pains) are common in early pregnancy and if they do not stop daily activities are not worrying. Severe or worsening abdominal pain in early pregnancy may be the first indication of ectopic pregnancy, and needs to be referred on the same day. Severe pain in later pregnancy may be a symptom of placental abruption, and like wise merits urgent referral. It also can be first sign of pre-eclampsia. It is particularly serious if any signs of shock are apparent (low blood pressure, fainting, rapid pulse) as internal bleeding may not become immediately apparent. Periodic mild cramping sensations in later pregnancy (lasting no more than a few seconds) are likely to be Braxton Hicks contractions, but if becoming regular and intensifying, beware that these might signify premature labour (by definition if before the 36th week of pregnancy). If any doubt refer for an assessment.	***
34.3	**Nausea and vomiting** with **dehydration** for more than one day in pregnancy	Refer if unremitting (patient unable to drink freely for more than one day) or if there are any features of dehydration (dry mouth, low skin turgor, dizziness on standing). The patient may need hospital admission for administration of fluids.	**
34.4	**Oedema** in pregnancy	Mild swelling of ankles and hands is common in mid to late pregnancy.	**

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		Refer if extending to more than 2 cm above the malleoli, if there is facial oedema or if associated with a rise in blood pressure of more than 15mmHg more than the usual blood pressure, or with any degree of hypertension (systolic > 140mg, diastolic >90mmHg). All these suggest the possibility of pre-eclampsia. Occasionally oedema can develop as a result of an undiagnosed cardiac abnormality.	
34.5	**Palpitations** in pregnancy	Usually palpitations are experienced when there is the occasional missed beat and this is nothing to worry about. However, the increased cardiac output may lead to a previously undiagnosed heart abnormality becoming apparent. Refer if pulse rate is either rapid (>100), irregular or if there are frequent missed beats (more than 1 every 5 beats). Remember that palpitations may result from the added strain on the cardiovascular system which results from anaemia in pregnancy.	**
34.6	**Pubic symphysis pain** in pregnancy	refer for a medical assessment of the pain if it is not responding to treatment, and if the patient is obliged to remain in bed (may benefit from a brace).	**
34.7	**Anaemia** (tiredness, depression, breathlessness, palpitations) in pregnancy	Anaemia is common in pregnancy. The risks of bleeding during labour are higher in women with anaemia so medical wisdom is that it should be treated with iron replacement.	*
34.8	**Itching (severe)** especially of palm and soles in pregnancy	May result from cholestasis which is a condition which can damage the fetus. Refer as a high priority.	**
34.9	**Potential pregnancy induced hypertension (PIH)**	refer if you find that the blood pressure has risen to 30mmHg systolic or 15mmHg diastolic above any measurement you have taken previously.	*
34.10	**Mild pregnancy induced hypertension (PIH)**	refer as a high priority if the diastolic blood pressure is between 90-99mmHg, and the systolic blood pressure is below 140mmHg.	**
34.11	**Moderate to severe pregnancy induced hypertension (PIH)**	refer as a high priority if the diastolic blood pressure is greater than 100mmHg or if the systolic blood pressure is greater than 140mmHg.	**
34.12	**Features of pre-eclampsia / HELLP syndromes:** headache, abdominal pain, visual disturbance, nausea and vomiting and oedema	Headache, abdominal pain and visual disturbances can presage eclampsia even in the absence of a raised blood pressure. Nausea and vomiting headache and oedema together suggest the development	***

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	(in mid-late pregnancy).	of the HELLP syndrome (haemolysis, liver abnormalities and low platelets). Both of these syndromes, which may overlap, are absolute emergencies.	
34.13	**Thromboembolism;** pain in calf, swollen or discoloured leg or breathlessness with chest pain or blood in sputum in pregnancy.	Refer any features of a thrombo-embolic event (DVT of calf or pelvic veins, pulmonary embolus or stroke) as emergency. The risks of these events are greater in pregnancy, and thromboembolism is currently the most significant cause of maternal death in pregnancy.	***
34.14	**Fever:** refer in pregnancy if high (>38.5C) and no response to treatment in 24 hours.	Refer for management of underlying cause as high fever may affect the embryo/fetus.	**
34.15	**Fever with rash** in first trimester of pregnancy	Refer suspected rubella or chicken pox so that health of embryo/fetus can be monitored.	**
34.16	**Fever with rash** in last trimester of pregnancy	Refer if chicken pox or shingles suspected as risk of fatal fetal varicella infection.	**
34.17	**Outbreak of genital herpes** in last trimester of pregnancy	Refer as risk of transmission of herpes virus to baby during delivery.	*
34.18	**Urinary tract infection** in pregnancy	Refer if not responding to your treatment in 1-2 days as increased risk of spread to kidneys and induction of miscarriage in first trimester.	**
34.19	**Offensive fishy watery discharge** (possible bacterial vaginosis) in pregnancy	Refer for treatment as bacterial vaginosis leads to increased risk of early labour and miscarriage.	**
34.20	**Any watery vaginal leakage** in mid to late pregnancy	A very watery discharge in mid to late pregnancy is amniotic fluid until proved otherwise. Premature rupture of membranes caries a risk of uterine infection and needs to be assessed as a high priority. Even if the pregnancy has come to term, premature rupture of membranes (PRM) without the onset of labour carries this risk, and conventional practice is to induce labour if hasn't started naturally, within 24 hours of PRM.	**

35 RED FLAGS OF THE PUERPERIUM (the eight weeks which follow delivery)			
	Description	**Reasoning**	**Priority**
35.1	**Fever** in the **puerperium**	Refer any case of fever developing in the first 2 weeks of the puerperium (temp	**

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		> 38C for more then 24 hours) to exclude possible uterine infection.	
35.2	**Post-partum haemorrhage:** refer if bleeding is any more than a blood stained discharge	Blood stained discharge (lochia) is normal in the early puerperium, but moderate to severe bleeding (like a heavy period or heavier) is not, and needs referral as can herald a more serious bleed. A profuse bleed of more than 500mil or the symptoms of shock (low blood pressure, fainting, rapid pulse rate) constitute an emergency.	*** **
35.3	**Thromboembolism;** pain in calf, discoloured or swollen leg or breathlessness with chest pain or blood in sputum in the puerperium.	Refer any features of a thrombo-embolic event (DVT or calf or pelvic veins, pulmonary embolus or stroke). The risks of these events are greater in the puerperium.	***
35.4	**Post natal depression**:	Refer any case of depression developing in the post natal period which is lasting for more than three weeks, and which is not responding to your treatment. Refer straight away if the woman is experiencing suicidal ideas, or if you believe the health of the baby to be at risk.	**
35.5	**Post natal psychosis**:	Refer straight away if you suspect the development of post-natal psychosis (delusional or paranoid ideas and hallucinations are key features) as this condition is associated with a high risk of suicide or harm to the baby.	**
35.6	**Insufficient breast milk:**	Refer if the mother is considering stopping breast feeding within the first few months after delivery because of apparently **insufficient milk-production**. In the case of poor latching on of the baby, advice from a midwife or health visitor may remedy the problem.	** *
35.7	**Sore nipples/blocked ducts** during the time of breast feeding	Refer for advice on breast feeding technique to midwife (early days) or health visitor. Encourage the mother to keep feeding despite the discomfort as a continued flow of milk can help with the healing.	**
35.8	**Mastitis** during the time of breast feeding not responding to treatment in 2 days	Refer only if not responding to treatment within two days, or if you suspect the development of an **abscess** (a firm mass is felt in the affected breast, and the mother feels very unwell). Encourage the mother to keep feeding despite the discomfort as a continued flow of milk can help with the healing.	** *

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36 RED FLAGS OF BREAST DISEASES			
	Description	**Reasoning**	**Priority**
36.1	**Insufficient breast milk** when breast feeding	Refer if the mother is considering stopping breast feeding within the first few months after delivery because of apparently **insufficient milk-production**. In the case of poor latching on of the baby, advice from a midwife or health visitor may remedy the problem.	** *
36.2	**Lactation/nipple discharge** but not breast feeding	Production of milk or nipple discharge in someone who is not breast feeding or in late pregnancy may be a sign of a pituitary disorder or breast cancer and investigation is merited.	*
36.3	**Sore nipples/blocked ducts** during the time of breast feeding	Refer for advice on breast feeding technique to midwife (early days) or health visitor. Encourage the mother to keep feeding despite the discomfort as a continued flow of milk can help with the healing.	**
36.4	**Mastitis** during the time of breast feeding not responding to treatment in 2 days	Refer only if not responding to treatment within two days, or if you suspect the development of an **abscess** (a firm mass is felt in the affected breast, and the mother feels very unwell). Encourage the mother to keep feeding despite the discomfort as a continued flow of milk can help with the healing.	** *
36.5	**Inflamed breast tissue** but not breast feeding.	Inflammation of a portion of a breast is common in breast feeding mothers (mastitis) but needs prompt assessment if it occurs in someone who is not lactating as it may signify inflammation from an underlying tumour.	** *
36.6	**Pain in the breast,** but no inflammation or lump.	Tender breasts are common with of periodic premenstrual hormone stimulation and this symptom can be asymmetrical. Pain is not a usual symptom of breast cancer, and an anxious patient can be reassured. However, question to ensure the pain is not actually chest pain…and refer if any doubt as angina can present with pain which may be described as pain in the breast.	*
36.7	**Lump in the breast:** Skin dimpling, fixity or irregularity of the lump are more sinister signs.	The conventional practice is now to refer all lumps in the breast for prompt assessment, as it is known that one in ten breast lumps are cancerous.	*
36.8	**Breast tissue development in teenage boys and adult**	Refer any case of gynaecomastia in a teenage boy or adult male. You can	*

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	men (gynaecomastia)	reassure a pubescent boy that this problem (if only confined to breast bud development) is a common feature of puberty which should settle down, but refer nevertheless to exclude rare endocrine disorders. Adult men with this condition need investigations to exclude cancerous change and endocrine disorders.	
36.9	**Eczema of nipple region**	A one sided crusty non healing skin disorder of the nipple may be a form of cancer (Paget's disease). Refer for investigation.	*

37 RED FLAGS OF SKIN DISEASES

	Description	Reasoning	Priority
37.1	**A rapidly enlarging patch(es) of painful, crusting or swollen red skin:**	Crusting spreading skin disease suggests **erysipelas** or **severe impetigo**. If spreading rapidly antibiotic treatment should be considered. Refer with some urgency if this occurs in someone with eczema can rapidly become a serious condition, (or it may indicate herpes infection of the broken skin: **eczema herpeticum**).	**
37.2	**A rapidly advancing region or line of redness tracking up the skin of a limb** (following the pathway of a **lymphatic vessel**):	This suggests the deep spread of infection from a distal site (**cellulitis and/or lymphangitis**), and should be considered for antibiotic treatment.	
37.3	**Pronounced features of candidal infection** (thrush) of the **skin** or **mucous membranes of the mouth:**	If candidiasis is widespread this suggests underlying chronic condition such as **immunodeficiency** or **diabetes mellitus.** Refer to exclude underlying disease	*
37.4	**The features of early shingles**: Intense one sided pain, with overlying rash of crops of fluid filled reddened and crusting blisters. The pain and rash correspond in location to a neurological dermatome. The pain may precede the rash by 1-2 days.	Shingles is an outbreak of the chicken pox virus (Varicella zoster) which has lain dormant within a spinal nerve root ever since an earlier episode of chicken pox. It tends to reactivate when the person is run down, exposed to intense sunlight and i the elderly. Warn the patient that the condition is contagious and advise that immediate treatment with the antiviral drug Acyclovir has been proven to reduce the severity of prolonged pain after recovery of the rash (in this way you are allowing the	**

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		patient the opportunity of making an informed decision about choosing conventional treatment). Shingles which affects more than one dermatome might be a feature of underlying HIV/AIDS infection.	
37.5	**Generalised itch:**	Generalised itch (not eczema) suggests an underlying medical cause (for example cholestasis) iron deficiency or cancer. It may also result from scabies. Refer for diagnosis if persistent over days.	*
37.6	**Itching (severe)** especially of palm and soles in pregnancy	May result from cholestasis which is a condition which can damage the fetus. Refer as a high priority.	**
37.7	**Large areas of redness affecting most (>90%) of the body surface (erythroderma**): Refer because of the risk of dehydration and loss of essential salts.	Erythroderma can develop in severe cases of eczema and psoriasis and as a reaction to some medications. It can become a medical emergency as the cardiovascular system can become under strain from the massively increased blood flow to the skin which results.	*** **
37.8	**Generalised macular rash (flat red spots)**	Refer if you suspect the possibility of a notifiable disease (i.e. rubella, measles or scarlet fever). NB chicken pox is not a notifiable disease and there is no need to refer if there are no other red flags.	
37.9	**Purpura or bruising rash (non-blanching):**	A rash which contains areas of non blanching or bruising suggests a bleeding disorder or vasculitis. Refer as an emergency if the patient is also acutely unwell with headache/fever or vomiting (possible meningococcal infection)	*** **
37.10	**Any lumps/moles with features suggestive of malignancy: irregularity**, a **tendency to bleed, crusting** or a **size greater than 5mm in diameter, intense black colour**.	Skin tumours include basal cell carcinomas, squamous cell carcinomas and malignant melanomas. Premalignant skin tumours are often in association wit h changes due to sun damage (on scalp, temples and the backs of the hands, and appear as spreading flat areas of dark pigmentation or irregular scabs which never seem to heal. If you have any doubt it is always worth referral for early diagnosis.	*
37.11	**Progressive swelling of the soft tissues of the face and neck (angio-oedema)** and/or **urticaria (nettle rash)**	Angioedema can result from acute allergic reaction and can precede life threatening asthma. Refer urgently if any features of respiratory distress (itchy throat/wheeze)**.**	***
37.12	**Hirsutism (unexplained hairiness)**	Refer any unexplained increase in bodily hair in middle life as this may indicate	*

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		an endocrine disease or, in women, polycystic ovary syndrome.	

38 RED FLAGS OF EYE DISEASES			
	Description	**Reasoning**	**Priority**
38.1	An intensely **painful** and **red eye**;	A painful red eye could result from iritis, choroiditis, acute glaucoma, corneal ulcer or keratitis. All of these are serious conditions and the patient should be advised to attend the nearest eye casualty department for early assessment.	*** **
38.2	A **painful red and swollen eyes and eyelids**; patient (often a child) very unwell.	If the eye and the surrounding tissues are intensely painful and swollen this could be a spreading infection of the soft tissues of the eye, orbital cellulitis. Refer urgently to the nearest eye casualty.	***
38.3	A **painful eye** with no obvious inflammation. Eye movements are painful.	If the pain is deep and intense, and exacerbated by eye movement, this is characteristic of optic neuritis or choroiditis. Refer as a high priority to the nearest eye casualty.	**
38.4	**Discharge from the eye**; if severe, prolonged and painful or if seen in the following vulnerable groups: the newborn the immunocompromised malnourished people	Discharge from the eye(s) is usually the result of acute allergic, bacterial or viral conjunctivitis and as such is usually self limiting, and will not necessarily require antibiotic treatment. Advise the patient that they may be very contagious whilst the eye is discharging. Only consider referral if the discharge continues for > 5 days or if there is any pain.	**
38.5	Sudden onset of painless **blurring** or **loss of sight in one or both eyes**	Loss of sight or blurring in one or both eyes may be due to thromboembolic disease, optic neuritis, retinal tear or corneal ulcer. Some of these conditions require high priority treatment to prevent blindness so refer as high priority to nearest eye casualty department. Floaters and blurring alone in middle age is usually the result of the benign condition of vitreous detachment. Nevertheless, referral is advised to exclude the more serious possible causes.	*** **
38.6	Sudden onset of painless **blurring** or **loss of sight in one**	Loss of sight accompanied by a headache in an older person (>50 yrs) may	*** **

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	or both eyes accompanied by **one sided headache**	represent temporal arteritis. This is more likely to occur in someone who has been diagnosed with polymyalgia. Urgent treatment with corticosteroids may prevent progression to blindness. Refer urgently to casualty.	
38.7	Gradual onset of painless **blurring** or **loss of sight in one or both eyes**,	Refer for assessment as treatment of the causes of gradual loss of sight may prevent progressive deterioration of the sight. Causes include refractive error, cataract, glaucoma, and macular degeneration.	*
38.8	**Squint**: in any child if previously undiagnosed.	Refer any child who demonstrates a previously undiagnosed squint. In young children this usually results from a congenital weakness of the external ocular muscles, but needs ophthalmological assessment to prevent long term inhibition of depth vision. If appearing in older children it may signify a tumour of the brain, pituitary or orbital cavity.	*
38.9	Recent onset of **double vision in an adult:**	Double vision suggests a physical distortion of the orbital cavity or damage to a cranial nerve. Refer as a high priority.	**
38.10	Recent onset of **drooping eyelid** (ptosis)	Possible damage to nerve by tumour or muscle wasting disease, Refer for investigation.	*
38.11	Features of **thyroid eye disease:** staring eyes; whites visible above and below pupils, inflamed conjunctivae; symptoms of hyperthyroidism (tremor, agitation, weight loss, palpitations).	Thyroid eye disease results from specific antibodies which are generated in Graves's disease. If sever it can threaten the health of the eyes as soft tissue builds up in the orbit, pushing the eye forward and putting pressure on the optic nerve.	*
38.12	**Inability to close the eye**	The eye may not close fully in thyroid eye disease and also in Bells Palsy; this can rapidly lead to serious damage of the conjunctiva and cornea, (which rely on the moistness of tears to remain healthy). A simple treatment is to keep the affected eye shut with medical tape until medical advice has been sought.	**
38.13	**Foreign body** in the eye	If there is a foreign body which cannot be removed, then gently keep the lid closed by means of a pad and medical tape and arrange urgent assessment at the nearest eye casualty	**

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39 RED FLAGS OF EAR DISEASES			
	Description	**Reasoning**	**Priority**
39.1	**Vertigo** in young person: lasting for more than 6 weeks or if so severe as to be causing recurrent vomiting or if increased risk of thromboembolic disease (e.g. in pregnancy)	The most likely cause of a sudden onset of dizzy spells in a young person is an inflammation of the inner ear (labyrinthitis). This usually settles down completely within 6 weeks. Medical treatment is to prescribe anti sickness medication, so only refer the sickness does not respond to your treatment. Rarely a sudden onset of dizziness is the consequence of a stroke or multiple sclerosis. Consider referral if there has been any previous episode of neurological disturbance (for example blurred vision or numbness) or if there is an increased risk or history of thromboembolic disease	** *
39.2	**Vertigo** in older person (older than 45 years)	Refer so that the patient can have investigations to exclude the possibility of stroke. (dizziness can result from brain stem or cerebellar stroke)	** *
39.3	**Complications** of **acute otitis media:** Persistent **fever/pain/confusion for more than 3-4 days** after the onset of the earache, (may indicate spread of the infection e.g. mastoiditis or brain abscess).	Otitis media is an uncomfortable but self limiting ear infection which commonly affects young children. It is now considered good practice not to prescribe antibiotics in a simple case, which will generally settle within 1-3 days, sometimes after natural perforation of the ear drum. This is a beneficial healing process. (so some sticky discharge for 1-2 days after an earache is not a cause of concern). However, persisting high fever, confusion or intense pain is not usual, and the child should be referred to exclude the rare possibility of infectious complications.	**
39.4	**Persistent discharge from the ear**	Chronic discharge from the ear for more than one week after the infection of otitis media has settled down may indicate the development of chronic otitis media, and this needs further investigation as there is risk of permanent damage to the middle ear.	*
39.5	Features of **mastoiditis: fever,** with a **painful** and	Mastoiditis is a now rare complication of otitis media and usually affects children.	**

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	swollen mastoid bone.	It is a serious condition as it is a bone infection and can be difficult to treat with antibiotics. Refer as a high priority.	
39.6	**New onset of difficulty hearing in a child**: lasting for more than 3 weeks	Refer if prolonged, if interfering with social interactions and education, or if associated with pain in the ear or dizziness. Most likely cause is "glue ear", a chronic accumulation of mucoid secretions in the middle ear.	*
39.7	**Sudden onset of absolute deafness** (one sided or bilateral)	Absolute deafness suggests damage to the acoustic nerve or auditory centres of the brain, and requires high priority/urgent assessment.	*** **
39.8	**Gradual onset of relative deafness in adult** for more than 7 days	A degree of hearing loss is common after a cold, but has usually subsided within a week. If hearing loss is slow and progressive referral for audiometric assessment is advised to exclude the rare but treatable slowly growing acoustic neuroma. Ear wax is probably the most common cause of relative hearing loss, so it is useful to possess an otoscope to check for this treatable possibility (can be softened by administering 5 drops of olive oil in each ear every night for a week)	*
39.9	**Tinnitus** if **progressive** or if associated with **hearing loss**	Tinnitus (ringing or buzzing in the ear) is usually a benign finding, and if remains fairly constant, or may increase in times of stress. It is not normally progressive or associated with hearing loss, and if it is this may suggest a progressive disorder of the ear or the auditory nerve. Refer for audiometric assessment.	*
39.10	**Earache in an adult for more than 3 weeks:**	Earache is common after a cold, but should subside within a week or so. If persistent (more than 3 weeks) and unexplained referral is merited as it is a red flag for cancer of the nasopharynx.	*

40 RED FLAGS OF DISEASES OF THE BONES			
	Description	**Reasoning**	**Priority**
40.1	**Pain:** Pain originating from bone is characteristically **fixed** and **deep**. It may either have an **aching** or **boring** quality. **Tenderness on palpation** and on **percussion** (weighty	It is worth referring any severe or persistent pain which you believe to be originating from bone as this more often than not results from an infective, cancerous or degenerative condition of the bone.	** *

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	tapping with the fingertip of the skin overlying the bone) indicates a structural abnormality such as a fracture. **Boring back pain at night** suggests that the origin is from bones rather than muscles. This symptom might suggest bone cancer.	Possible causes of bone pain include traumatic bruising or fracture, osteomyelitis (bone infection), tumour, Paget's disease, osteoporosis and osteomalacia. The collapse of vertebrae in osteoporosis can lead to a sudden onset of vertebral pain and radiated pain round to the front of the body alone the line of the affected spinal nerve. Although not usually serious in itself an osteoporotic collapse needs to be referred for consideration of medical management of the osteoporosis and also exclusion of weakening of bones by cancer deposits, as this can mimic osteoporosis.	

41. RED FLAGS OF LOCALISED DISEASES OF THE JOINTS LIGAMENTS AND MUSCLES			
	Description	**Reasoning**	**Priority**
41.1	**Features of traumatic injury to a muscle or joint (which may require surgical treatment or immobilization):** Sudden onset of **pain or swelling in a joint** (possible haemarthrosis), sudden **severe pain and swelling around a joint** with **reluctance to move** (sprain or strain or possible fracture), sudden onset of **tender swelling in a muscle** (possible haematoma), **locking of the knee** joint (meniscal cartilage tear).	If there are any of these features of traumatic injury to a muscle or joint, and if you are not familiar with sports injuries then it is wise to refer for appropriate immediate assessment (including X ray) and orthopaedic management. The rest/ice/compression/elevation (RICE) formula should be considered if there is significant inflammation (redness and swelling). Rest means ensuring that the injured region is immobilized and this needs to be effected by means of recognised first aid approaches (e.g. splints, bandages and slings)	**
41.2	**Features of intervertebral disc prolapse and severe nerve root irritation**: Sudden onset of **low back pain so severe that walking is impossible**; severe **sciatica**, **difficulty urinating or defaecating**	In most cases disc prolapse is not an emergency condition, and may do very well with appropriate acupuncture, cupping and massage techniques. Even with sciatic pain you can expect that your treatment might bring relief without need for referral. In most of these cases the referred pain and weakness indicates compression of one of more of the L3, L4, L5 or S1 nerve roots, and the symptoms are usually one sided. Expect at least partial relief of these symptoms within a few days of	**

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		treatment. However medical treatment (anti-inflammatory and muscle relaxant medication) can be very useful if the pain is very severe and there is a lot of muscular spasm which is not responding to your treatment. Difficulty in urination or defaecation or sacral numbness are rare but serious signs which indicate compression of the delicate lower sacral roots. If these symptoms are apparent refer for assessment as a high priority (see cauda equina syndrome 41.3).	
41.3	**Cauda equina syndrome:** numbness of buttocks and perineum **(saddle anaesthesia)** with **bilateral numbness or sciatica** in legs**. Difficulties in urination or defaecation are** serious symptoms**.**	The cauda equina (horse's tail) is the bunch of nerves which descend from the bottom of the spinal cord from the level of L1-2 downwards. These nerve roots supply sensation and motor impulses to the perineum, buttocks, groin and legs. Cauda equina syndrome suggests the compression of a number of these roots (usually from a central prolapsed disc, but possibly from tumour or other spinal growth). This is a serious situation as prolonged compression to the perineal supply can lead to permanent problems with urination, defaecation and sexual function. Refer as a high priority.	**
41.4	**Features of septic or crystal arthritis:** A **single hot swollen and very tender joint**. Patient is **unwell**. Not usually associated with injury, but may occasionally be caused by a penetrating injury of the joint space.	A hot swollen joint is a sign of possible joint infection. This presents a grave risk to the health of the joint and needs to be referred so that infection can be excluded. However, the most common cause of a single hot and swollen joint is gout (crystal arthritis) which can respond well to acupuncture alone. If this is the case the doctor may wish to prescribe anti-inflammatory medication, but after diagnosis has been confirmed it is worth using needles in the first instance and reserving medication if no benefit within 3-7 days.	**
41.5	**Unexplained intense persistent shoulder pain unrelated to shoulder movement (**for more than 2 weeks)	Shoulder pain which seems to be unrelated to shoulder movement might be referred from a tumour at the apex of the lung (Pancoast tumour). A frozen shoulder is the most common (and benign cause of shoulder pain) and this is characterised by inability to use the affected joint. Refer any case in which the pain does not fit this picture.	*

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42 RED FLAGS OF GENERALISED DISEASES OF THE JOINTS LIGAMENTS AND MUSCLES			
	Description	**Reasoning**	**Priority**
42.1	**Features of a degenerative arthritis which may benefit from joint replacement:** Severe disability from long-standing pain and stiffness in the hips, knees or shoulders.	Acupuncture can be very helpful supportive treatment in advanced osteoarthritis of hip, knee or shoulder. Referral needs to be considered if the condition is deteriorating to a point when activities of daily living are becoming compromised. Refer relatively early as the patient may need at first to be put on a waiting list, meaning that surgical treatment may only come after a delay of some weeks to months.	*
42.2	**Any features of an inflammatory arthritis**: **symmetrical pain,** stiffness and swelling of the joints or **symmetrical stiffness and pain in the sacroiliac joint**. May be associated with a fever or sense of malaise.	All episodes of inflammatory arthritis (distinguished from osteoarthritis by fairly rapid onset (over days to weeks rather then months to years), joint swelling, fever and general malaise) are best investigated by a conventional practitioner so that auto-immune disease, or other serious underlying diseases can be excluded. Some forms of inflammatory arthritis are erosive and powerful medical approaches should be considered to prevent progression and permanent joint damage	** *
42.3	**Features of polymyalgia rheumatica**: Prolonged **pain and stiffness and weakness of the muscles** of the **hips and shoulders** associated with **malaise** and **depression**. Refer urgently if there is a sudden onset of a **severe one sided temporal headache** or **visual disturbances.**	Polymyalgia rheumatica is an inflammatory condition of the muscles of the shoulders and hips which predominantly afflicts people over the age of 50 years. Because it is inflammatory in nature there may be associated malaise, but the main symptoms are pain and weakness of the shoulder and hip muscles. Difficulty in standing from a sitting position is a classic sign of hip weakness. There is an increased risk of the serious condition of temporal arteritis and referral would enable the patient to make a decision to take the medical treatment of corticosteroids (see Table 23).	** * Urgent if severe one sided headache or visual disturbances ***

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43 RED FLAGS OF MENTAL HEALTH DISORDERS			
	Description	**Reasoning**	**Priority**
43.1	**Suicidal thoughts:** with features that suggest serious risk: old age, male sex, social isolation, concrete plans in place for how to do it.	This symptom may not be volunteered by a person suffering from depression. It is alright to ask something like “have you ever thought life is not worth living?” Such a thought does not necessarily signify serious risk, but if present should lead you to question further about features which suggest seriousness of intent and a high risk social situation. High risk factors include **old age, male sex, isolation** or **marital separation**, and **plans in place** about how to do it. If you have any concerns that your patient is at a serious risk of suicide then you should discuss your concerns with the G.P. This is a situation when it may be appropriate to breach your normal practice of confidentiality.	**
43.2	**Hallucinations, delusions** or other evidence of **thought disorder** together with evidence of **deteriorating self care** and **personality change:**	These are all features of a psychosis such as schizophrenia. Suicide risk is high. Referral has to be considered if you recognize that the patient or other people are at serious risk of harm if you do not disclose the patient's condition. As may be very difficult for you to fully assess this risk, it is advised that unless you are absolutely sure of the patient’s safety, you should refer them to professionals who are experienced in the treatment of mental health disorders. Referral in such a situation may result in the serious outcome of the patient being detained in hospital against their will under a section of the Mental Health Act. As this may be a situation in which you may need to breach patient confidentiality, you may wish to seek prior advice from the BAcC about how to proceed.	**
43.3	**Features of mania:** increasing **agitation, grandiosity, pressure of speech and sleeplessness** with **delusional thinking**	Mania is a feature of bipolar disorder, and is a form of psychosis which carries a high risk of behaviour which can be both socially and physically damaging to the patient. Suicide risk is high. Referral has to be considered if you recognize that the patient or other people are at serious risk of harm if you do not disclose the patient's condition. As may	**

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		be very difficult for you to fully assess this risk, it is advised that unless you are absolutely sure of the patient's safety, you should refer them to professionals who are experienced in the treatment of mental health disorders. Referral in such a situation may result in the serious outcome of the patient being detained against their will in hospital under a section of the Mental Health Act. As this may be a situation in which you may need to breach patient confidentiality, you may wish to seek prior advice from the BAcC about how to proceed.	
43.4	Evidence of an organic mental health disorder; e.g. **confusion, deterioration in intellectual skills, loss of ability to care for self.**	Organic mental health disorders are by definition those which have a medically recognized physical cause, such as drug intoxication, brain damage or dementia. They are characterised by confusion or clouding of consciousness, and loss of insight. Visual hallucinations may be apparent, as in the case of delirium tremens (alcohol withdrawal). Referral has to be considered if you recognize that the patient or other people are at serious risk of harm if you do not disclose the patient's condition. As it may be very difficult for you to fully assess this risk, it is advised that unless you are absolutely sure of the patient's safety, you should refer them to professionals who are experienced in the treatment of mental health disorders. Referral in such a situation may result in the serious outcome of the patient being detained against their will in hospital under a section of the Mental Health Act. As this may be a situation in which you may need to breach patient confidentiality, you may wish to seek prior advice from the BAcC about how to proceed.	**
43.5	**Severe depression/obsessive-compulsive disorder or anxiety:** if not responding to treatment and seriously affecting quality of life.	In certain cases of minor mental health disorder the symptoms of depression, obsessive thoughts or anxiety can be so overwhelming as to be disabling. Referral needs to be considered for psychiatric or psychological support if these symptoms appear to be seriously affecting quality of life (for example the patient is unable to leave their home)	*

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43.6	**Severe disturbance of body image:** if not responding to your treatment, and resulting in features of progressive **anorexia nervosa** or **bulimia nervosa** (e.g. progressive weight loss, secondary amenorrhoea, or repeated compulsion to bring about vomiting).	Severe forms of eating disorder can result in progressive ill health which can be so severe as to be life threatening. If the symptoms are not responding to your treatment you should consider referral for professional psychiatric support. This may be met with resistance. Referral in such a situation may result in the serious outcome of the patient being detained against their will in hospital under a section of the Mental Health Act. As this may be a situation in which you may need to breach patient confidentiality, you may wish to seek prior advice from the BAcC about how to proceed.	*
43.7	Features of **autism** in a child**:** slow development of speech, impaired social interactions, little imaginative play, obsessional repetitive behaviour.	Remember that mild degrees of autism may not be diagnosed until the child reaches secondary school age. Refer if you are concerned that the child is demonstrating **impaired social interactions** (aloofness), **impaired social communication** (very poor eye contact, awkward and inappropriate body language) and **impairment of imaginative play** (play may instead be dominated by obsessional behaviour such as lining up toys or checking), as early diagnosis can result in the child being offered extra educational and psychological support.	*
43.8	**Post natal depression**:	Refer any case of depression developing in the post natal period which is lasting for more than three weeks, and which is not responding to your treatment. Refer straight away if the woman is experiencing suicidal ideas, or if you believe the health of the baby to be at risk.	** *
43.9	**Post natal psychosis**:	Refer straight away if you suspect the development of post-natal psychosis (delusional or paranoid ideas and hallucinations are key features) as this condition is associated with a high risk of suicide or harm to the baby.	**

44 RED FLAGS OF CHILDRENS DISEASES			
	Description	**Reasoning**	**Priority**
44.1	**Maternal concern:**	Any condition in which the **parent is very concerned** about the health of her child is worth referring for a second opinion. The parent is the person who will	** *

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		know the best is something is not right with their child, even if it is not very specific, and it is best to respect this as small children sometimes do not generate very specific symptoms even when seriously unwell.	
44.2	**Inconsolable baby:** for more than 3 hours	Although this feature is very common and usually benign, consider referral if inconsolable and unexplained crying (for at least three hours) starts in a previously settled baby.	**
44.3	**Childhood cancer**: Red Flags include progressive symptoms: **loss of weight, sweats, poor appetite, a**n **unexplained lump or mass** or an enlarged **unilateral lymph node** (>1.5cm in diameter), recurrent **infections, bruising, anaemia** and **bleeding.**	Refer any case in which there is a **short history** of new unexplained symptoms which have arisen within the past weeks to months and which are **progressive.** Also; refer as a high priority if there are warning features of **bone marrow failure.**	** *
44.4	**Any fever** in a **child less than 3 months**	Infections in infants can become serious conditions very quickly because of the immature immune system, poor temperature control and small size. They lead easily to high fever and dehydration. The infant is at increased risk of convulsions and circulatory collapse. However, in this age group fever is common, and usually is **not** serious.	**
44.5	**Fever > 38.5C in a child (<8yrs)** if not responding to treatment in 2 hours	High fevers can promote infantile convulsions in young children. Treatment to bring the temperature down includes keeping the environment cool, tepid sponging, acupuncture/homeopathy and if all else fails antipyretic medication such as paracetamol or ibuprofen suspension.	**
44.6	**Febrile convulsion:** ongoing	Refer a case in which the convulsion is not settling within 2 minutes as an emergency. Ensure child is kept in a safe place in the recovery position whilst help arrives.	***
44.7	**Febrile convulsion:** recovered	Refer all cases in which the child has just suffered from a febrile convulsion (the parents need advice on how to manage future fits, and the child should be examined by a doctor).	**
44.8	**Dehydration in an infant (< 3yrs)**	A dehydrated infant is at high risk of circulatory collapse because or small size	*** **

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	Signs include **dry mouth and skin, loss of skin turgor** (firmness), **drowsiness, sunken fontanelle** (soft spot in region of Du24) and **dry nappies**	and immature homeostatic mechanisms. Infants who are dehydrated may lose the desire to drink and so the condition can rapidly deteriorate	
44.9	**Dehydration in children (> 3yrs)** if severe or prolonged for more than 48 hours. Signs include **dry mouth and skin, loss of skin turgor, low blood pressure, dizziness on standing** and **poor urine output**	Although not as unstable as an infant, a dehydrated child or adult still needs hydration to prevent damage to the kidneys. Referral should be made if the patient is unable to take fluids or if the dehydration persists for more than 48 hours. Refer elderly people immediately as the ability to take in fluids is often reduced and the kidneys and brain are more vulnerable to damage	**
44.10	**Confusion in older children with fever**	Confusion is common and usually benign in young children (< 8 years of age) and also elderly frail people when a fever develops. However it is not usual in older children and should be referred to exclude central nervous system involvement (for example meningitis or brain abscess).	**
44.11	Any features of a **notifiable disease*[13]:**	All the immunisable diseases are notifiable diseases. The Chinese medical practitioner should consider referral of these cases so that the general practitioner can report the episode.	**
44.12	**Vomiting:** Refer if persistent, and either a cause of distress to the child (i.e. not possetting), a cause of **dehydration**, or if **projectile**.	Vomiting is common in children, and usually self limiting. In babies regurgitation of milk is normal and not a cause for concern if the child is contented and continuing to gain weight, Refer if there are features of dehydration, or if the vomiting is projectile (a feature of pyloric stenosis in newborn babies). Food poisoning and dysentery are notifiable diseases*.	**

[13] **Notifiable diseases***

Notification of a number of specified infectious diseases is required of doctors as a "statutory duty" under the Public Health (Infectious Diseases) 1988 Act and the Public Health (Control of Diseases) 1988 Act.

The Health Protection Agency (HPA) Centre for Infections collates details of each case of each disease that has been notified. This allows analyses of local and national trends.

This is one example of a situation in which there is a legal requirement for a doctor to breach patient confidentiality.

Diseases which are notifiable include:

Acute encephalitis, Acute poliomyelitis, Anthrax, Cholera, Diphtheria, Dysentery, Food poisoning, Leptospirosis, Malaria, Measles, Meningitis (bacterial and viral forms), Meningococcal septicaemia (without meningitis), Mumps, Ophthalmia neonatorum, Paratyphoid fever, Plague, Rabies, Relapsing fever, Rubella, Scarlet fever, Smallpox, Tetanus, Tuberculosis, Typhoid fever, Typhus fever, Viral haemorrhagic fever, Viral hepatitis (including hepatitis A, B and C), Whooping cough, Yellow fever

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44.13	**Diarrhoea:** if persistent, and associated with either **dehydration**, **poor weight gain, weight loss**, or **chronic ill health**.	Chronic loose stools in a child may signify the presence of an infectious organism, coeliac disease, inflammatory bowel disease. Refer as a high priority of dehydration present. Food poisoning and dysentery are notifiable diseases*.	** *
44.14	**Soiling with faeces (in underwear or bed):**	Always refer for diagnosis if persistent and appearing in a previously continent child (could signify constipation with faecal overflow, a developmental problem of the bowel or emotional disturbance).	*
44.15	**Recurrent or constant intense abdominal pain:** if pain is associated with **fever, vomiting, collapse** and **rigidity and guarding** on examination.	All these features are signs of the acute abdomen, which in children is most commonly due to appendicitis or a form of bowel obstruction (from a twist or obstruction in a hernia). Urgent surgical assessment is required. All these conditions can spontaneously resolve, but a recurrence is likely. Refer for treatment or assessment.	*** **
44.16	**Recurrent mild abdominal pain**	Features of abdominal pain in children which suggest a more benign (functional) cause include; mild pain which is worse in the morning, location around the umbilicus, and pain is worse with anxiety.	No need to refer
44.17	**Jaundice** (yellowish skin, yellow whites of the eyes and maybe dark urine and pale stools)	Jaundice is always of concern in children and babies with exception of the mild form of jaundice which can affect newborn. Refer all cases to ensure serious liver disease is excluded	**
44.18	Any new onset of **difficulty breathing** (i.e. increased respiratory rate[14] (see table), nocturnal wheeze or noisy breathing) in a small child (less than 8 years of age). Also if there is unexplained **sudden blockage of one nostril.**	Always take a new onset of difficulty breathing of in a child seriously and refer for medical assessment to exclude serious disease. Common causes include lower respiratory infections, asthma, allergic reactions, inhalation of foreign bodies, and congenital heart disease. A nostril may suddenly block after the unwitnessed insertion of a foreign body. This is a serious situation as the foreign body (e.g. a pea) may then become inhaled.	*** **

[14] **Categorisation of respiratory rate in children**

The normal range for respiratory rate varies according to age in children

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44.19	**Complications of tonsillitis**: Severe constitutional upset not responding to treatment within 5 days	Tonsillitis is common and usually self limiting in children. The child should be back to their usual selves within 3-4 days, so refer if no improvement after this time period.	**
44.20	**Complications of tonsillitis:** A single grossly enlarged infected tonsil (quinsy) in an unwell and feverish child	Quinsy is the development on an abscess in the tonsil. It carries a serious risk of obstruction of the airways and requires a same day surgical opinion. Refer urgently if the child is experiencing any restriction in breathing (stridor may be heard; (see 44.20)	*** **
44.21	**Stridor** (harsh noisy breathing heard on both the inbreath and outbreath)	Stridor is a noise which suggests upper airways obstruction. It is a serious warning sign if it develops suddenly. It suggests possible swelling of the air passages due to laryngotracheitis, quinsy or epiglottitis. If restriction to breathing is significant the patient with stridor will be sitting very still. It is important not to ask to see the tongue as this can affect the position of the epiglottis, and may worsen the obstruction. Exposing the patient to steam (from a nearby kettle or running shower) can alleviate swelling whilst help arrives.	*** **
44.22	**Features of severe asthma:** At least two of the following**:** * **rapidly worsening breathlessness;** * **increased respiratory rate (see table below)**[15], * **reluctance to talk** because of breathlessness, * **need to sit upright** and still to assist breathing. * **cyanosis** is a very serious sign .	Severe asthma is a potentially life threatening condition and may develop in someone who previously had no history of severe attacks. Urgent referral is required so that medical management of the attack can be instigated. Keep the child as calm as possible whilst help arrives. Cyanosis describes the blue colouring which appears when the blood is poorly oxygenated. Unlike the blueness from cold which only affects the extremities, central cyanosis from poor oxygenation can be seen on the tongue.	***

The following rates indicate **moderate to severe breathlessness**;

newborn (0-3 months)	>60 breaths per minute
infant (3m up to 2 years)	>50 breaths per minute
young child (2 years up to 8 years)	>40 breaths per minute
older child-adult	>30 breaths per minute

[15] **Categorisation of respiratory rate in children**

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44.23	**Bedwetting:** if persisting over the age of 5 years.	Consider referral if the child is over 5 years of age, so that physical causes can be excluded and so parents can have access to expert advice.	*
44.24	**Features of vesico-ureteric reflux disease (VUR) in a child**: Any history of recurrent episodes or a current episode of **cloudy urine** or **burning on urination** should be taken seriously in a **prepubescent child**.	Urine infections are common in young children but need to be taken seriously, particularly if there is a history of recurrent infections. The small child is more vulnerable to vesico-ureteric reflux (VUR) which means that when the bladder contracts some urine is flushed back towards the kidneys. In the case of infection of the bladder, then VUR can lead to infectious organisms causing damage to the delicate structure of the kidney. Sometimes this damage occurs with very few symptoms, but if cumulative and undetected can lead to serious kidney problems and high blood pressure in later life. For this reason it is wise to refer all prepubescent children with a history of symptoms of urinary infections to exclude the possibility of VUR.	* if no symptoms ** if current symptoms
44.25	Acute **testicular pain:** radiates to groin, scrotum or low abdomen	Refer any sudden onset of severe testicular pain (radiates to groin, scrotum or low abdomen). This could signify inflammation of the testicle (orchitis) or a twist of the testicle (torsion). If the pain is very intense (with collapse and vomiting) refer as emergency.	** ***
44.26	**Precocious puberty:** secondary sexual characteristics before the age of 8 years in girls and 9 years on boys.	Refer if secondary sexual characteristics begin to appear before the age of 8 years in girls and 9 years in boys so that an endocrine cause can be excluded.	*
44.27	**Delayed puberty:** secondary sexual characteristics not apparent by the age of 15 in girls and 16 in boys.	Refer if secondary sexual characteristics have not started to appear by the age of 15 years in girls and 16 years in boys. Refer if menstruation has not begun by the time of a girl's 17th birthday (**primary amenorrhoea**).	*

The normal range for respiratory rate varies according to age in children
The following rates indicate **moderate to severe breathlessness**;

newborn (0-3 months)	>60 breaths per minute
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44.28	**Epilepsy**: Refer any child who has suffered from a suspected **blank episode (absence)** or **seizure**	Epilepsy most commonly first presents in childhood, and is more common in children who have experienced febrile convulsions. Early diagnosis is important so that early management can help prevent deleterious effects on education and social development.	*
44.29	**Squint** or **double vision**: in any child if previously undiagnosed.	Refer any child who demonstrates a previously undiagnosed squint. In young children this usually results from a congenital weakness of the external ocular muscles, but needs ophthalmological assessment to prevent long term inhibition of depth vision. If appearing in older children it may signify a tumour of the brain, pituitary or orbital cavity.	*
44.30	**Complications of acute otitis media in a child**: **Persistent fever/pain/confusion** for more than 3-4 days after the onset of the earache, (may indicate spread of the infection e.g. **mastoiditis** or **brain abscess**).	Otitis media is an uncomfortable but self limiting ear infection which commonly affects young children. It is now considered good practice not to prescribe antibiotics in a simple case, which will generally settle within 1-3 days, sometimes after natural perforation of the ear drum. This is a beneficial healing process. (So some sticky discharge for 1-2 days after an earache is not a cause of concern). However, persisting high fever, confusion or intense pain is not usual, and the child should be referred to exclude the rare possibility of infectious complications.	**
44.31	**New onset of difficulty hearing in a child**: lasting for more than 3 weeks	Refer if **prolonged**, if **interfering with social interactions and education**, or if associated with **pain in the ear** or **dizziness**. Most likely cause is “glue ear”, a chronic accumulation of mucoid secretions in the middle ear.	
44.32	**Persistent discharge from the ear in a child**	Chronic discharge from the ear for more than one week after the infection of otitis media has settled down may indicate the development of **chronic otitis media**, and this needs further investigation as there is risk of permanent damage to the middle ear.	*
44.33	Features of **autism:** slow development of speech, impaired social interactions, little imaginative play, obsessional repetitive behaviour.	Remember that mild degrees of autism may not be diagnosed until the child reaches secondary school age. Refer if you are concerned that the child is demonstrating **impaired social interactions** (aloofness), **impaired social communication** (very poor eye contact, awkward and inappropriate body	

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		language) and **impairment of imaginative play** (play may instead be dominated by obsessional behaviour such as lining up toys or checking), as early diagnosis can result in the child being offered extra educational and psychological support.	
44.44	**Red flags for sexual or physical abuse:** ▪ **Unexplained or implausible injuries** ▪ **Miserable withdrawn child** ▪ **"Frozen watchfulness"** ▪ **Overtly sexualised behaviour in prepubescent child** ▪ **Vaginal or anal discharge or itch**	All these features may have a benign explanation, but if you have any concerns you should take the situation very seriously. You can start by seeking confidential advice from the NSPCC helpline, If you need to report the case then this should be done via the Child Protection Committee which is part of the local services team. This is definitely a situation in which you should break your professional obligation of confidentiality. If you have any concerns about doing this, then you can discuss the case with the BAcC ethics advisers.	**

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