**HAEMATOLOGY REFERRAL RECOMMENDATIONS**

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<td>Haematology can be categorised into the following disorders:</td>
<td>A thorough history and physical examination is required to determine the specific diagnosis (see below). Full blood count and other appropriate investigations are necessary for Haematological referrals.</td>
<td>Specific treatments depend on the diagnoses identified, as noted below.</td>
<td>Circumstances for referral are indicated below with reference to the appropriate specialty/specialties.</td>
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**Diagnosis / Symptomatology**

**Acute Malignant Disorders**

**Acute leukaemia/lymphoma**

**KEY POINTS:**

Any suspicion of acute leukaemia/lymphoma requires urgent discussion with Haematologist

For example:

1. FBC suggesting acute leukaemia/lymphoma.
2. Suggestive clinical signs, eg bleeding gums, splenomegaly, PUO lymphadenopathy.

Ring Haematologist on call at hospital.

Immediate referral with a view to admission – Category 1.
## Anaemia

### KEY POINTS:
- Duration of anaemia.
- Previous anaemia assessment.
- Family history.
- Bleeding history especially menstrual loss.
- Dietary history.
- Drug history.
- Exclude surgical causes of iron deficiency.

### Investigations:
- FBC/ESR/Coombs test.
- B12/red cell folate.
- Iron studies including ferritin and Transferrin saturation.
- Reticulocytes.
- Renal function.
- LFTs.
- Immunoglobins and serum electrophoresis.
- MSU.

### Management Options
GI tract blood loss must be excluded in all cases of iron deficiency. Most iron deficiency does not require Specialist Haematology Assessment. Low B12 requires exclusion of pernicious anaemia and other causes of malabsorption. Gastroenterology referral should be considered.

### Referral Guidelines
- Persistent unexplained anaemia – Category 3 or 4.
- Anaemia refractory to iron and B12/folate – Category 3.
- Haemolytic anaemia of any cause – Category 2 or 3.
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| **Bleeding disorders**     | **KEY POINTS:**  
- Detailed family history  
- Detailed type of bleeding eg. Mucocutaneous, joint bleeding or menorrhagia  
Investigations:  
- Coagulation screen (PT PTT TCT).  
- Factor assay appropriate to family history eg. Haemophilia A-Factor VIII, Von Willebrand’s disease VWF screen. | If acutely bleeding ring Haematologist on-call at Hospital for advice re management. | • Acute bleeding should be referred for admission – Category 1.  
• Pre-surgery assessment – refer Category 4.  
• Carrier status assessment – Category 4. |
| **Familial Conditions**    |            |                    |                    |
| **Bleeding disorders of uncertain cause** | **KEY POINTS:**  
- May have a family history  
- Type of bleeding eg. Mucocutaneous, joint bleeding, menorrhagia  
- Drug history  
- Post-surgery bleeding?  
- Post-trauma bleeding?  
Investigations:  
- Coagulation screen (PT PTT TCT).  
- FBC.  
- LFTs.  
- Renal function.  
- Immunoglobins and serum electrophoresis.  
- MSU. | If actively bleeding stop NSAID and aspirin.  
If acutely bleeding ring Haematologist on-call at hospital for advice re management.  
Mild von Willebrand’s Disease may be a cause of menorrhagia, but gynaecological causes should also be excluded. | • Acute bleeding should be referred for admission – Category 1.  
• Pre-surgery assessment – refer Category 4.  
• Carrier status assessment – Category 4. |
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<th>Thrombocytopenia</th>
<th><strong>KEY POINTS:</strong></th>
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<tr>
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<td>• Duration.</td>
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<td>• Detailed past history, eg liver, autoimmune.</td>
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<td>• Drug history.</td>
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<td>• Alcohol history.</td>
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<td>• Recent Vaccination history.</td>
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<td>Investigations:</td>
<td>• FBC, ESR, Iron studies B12/Folate.</td>
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<td></td>
<td>• LFTs.</td>
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<td>• Renal function.</td>
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<td>• Immunoglobins and serum electrophoresis.</td>
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<td>• MSU.</td>
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<td>• ANF/autoimmune screen/platelet antibodies.</td>
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<td>Discontinue NSAID and aspirin unless clear indication to continue. Review drug history and stop offending agents if possible.</td>
<td>• Patients with a count less than 20 x 10⁹/L should be referred for immediate admission assessment – Category 1.</td>
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<td>• Patients with a count less than 50 x 10⁹/L refer for urgent outpatient assessment – Category 2</td>
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<td>• Stable/mild thrombocytopenia refer for outpatient assessment – Category 4.</td>
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<td><strong>Chronic Malignant Disorders</strong></td>
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| Chronic Myeloid Leukaemia | **KEY POINTS:**  
- Patients with very high white cell counts (>60 x 10^9/l) and/or massive splenomegaly. Discuss with Haematologist urgently.  
- Less advanced cases can be seen urgently in outpatient clinics. | | Ring Haematologist on call at hospital with a view to immediate review – Category 1.  
- Refer to urgent outpatient clinic – Category 2 (Discuss with Haematologist) |
| Chronic Lymphocytic Leukaemia | **KEY POINTS:**  
- Most cases are early disease with normal haemoglobin and platelets and no splenomegaly. | | Referral Category 4  
- Progressive disease with anaemia, lymphadenopathy, splenomegaly and thrombocytopenia require referral urgent – Category 2.  
- Complications of haemolysis requires immediate referral – Category 1. |
| Myelodysplastic disorders | **KEY POINTS:**  
- This is a spectrum of disorders presenting with unexplained cytopenias of varying severity.  
- A bone marrow examination is required to confirm diagnosis. | Patients with active infection and/or ongoing bleeding discuss with Haematologist. | Acutely unwell patients secondary to neutropenia or thrombocytopenia require immediate admission – Category 1.  
- Uncomplicated patients outpatient referral – Category 3. |
| Myeloproliferative Disorders | **KEY POINTS:**  
- As above, this is a spectrum of disorders presenting with unexplained raised haemoglobin, platelets and neutrophils. | | Patients with clinical hyperviscosity, thrombosis or bleeding for admission – Category 1.  
- Uncomplicated refer to outpatient assessment – Category 4. |
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<td><strong>Aplastic anaemia</strong></td>
<td><strong>KEY POINTS:</strong> - Consider drug induced causes.</td>
<td>(An urgent assessment and bone marrow may be required – discuss with Haematologist).</td>
<td>• Most of these referrals are outpatients – Category 3. • Severe cytopenia, platelets &lt; 30, neutrophils &lt; 1 – contact Haematologist.</td>
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<td><strong>Red cell aplasia</strong></td>
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<td><strong>Hereditary Haemolytic Anaemias eg. Thalassemia, Hereditary Spherocytosis</strong></td>
<td><strong>KEY POINTS:</strong> - Family History.</td>
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<td>• Most referrals are Outpatients - Category 3 or 4</td>
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<td><strong>Chronic Eosinophilia</strong></td>
<td><strong>KEY POINTS:</strong></td>
<td></td>
<td>• Uncomplicated cases – Category 3 or 4</td>
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<td><strong>Iron Overload</strong> ?Haemochromatosis</td>
<td><strong>KEY POINTS:</strong> - Family history. - Exclude chronic disease.</td>
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<td>• Most referrals are Outpatient – Category 3 or 4.</td>
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<td>Investigations: - Iron studies, include Ferritin and Transferrin Saturation. - Genetic testing.</td>
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| Familial Thrombotic Disorders | **KEY POINTS:**  
- Detailed family history.  
- Detailed type of thrombosis eg. Venous or arterial  
- Recurrent or single event?  
- Recent surgery/trauma.  
- Pregnancy.  
- Drug history including oral contraceptive or HRT.  
- Smoking history.  
Investigations:   
- FBC/ESR.   
- LFT’s.   
- Renal function.   
- Coagulation screen.   
- Thrombophilia screen. | Anticoagulation therapy should be continued as previously recommended until Haematology review. If pregnant will require a joint approach between Haematologist, Obstetrician or Physician specialising in disorders of pregnancy. | • Acute thrombotic event requires urgent assessment query admission to acute medical team – Category 2.  
• Assessment required prior to planned surgery or pregnancy – Category 4. |
| Thrombotic disorders of uncertain causes | **KEY POINTS:**  
- May have a family history.  
- Type of thrombosis eg. DVT, arterial.  
- Drug history including oral contraceptive or HRT.  
- Post-surgery thrombosis?  
- Post-trauma thrombosis?  
- Pregnancy associated thrombosis?  
- Important group aged under 40 recurrent unexplained thrombosis.  
- Smoking history.  
Investigations:   
- Coagulation screen.   
- FBC/ESR.   
- LFTs.   
- Renal function.   
- Thrombophilia screen. | Anticoagulation therapy should be continued as previously recommended until Haematology review. If pregnant will require a joint approach between Haematologist, Obstetrician or Physician specialising in disorders of pregnancy. | • Acute thrombotic event requires urgent assessment query admission to acute medical team – Category 2.  
• Assessment required prior to planned surgery or pregnancy – Category 4. |
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<th>Myeloma/Plasmacytoma</th>
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| • Bone pain.  
• Anaemia.  
• Hypercalcaemia.  
• Cord compression.  
• Renal failure.  
• Hyperviscosity.  |
| **Investigations:**  
• FBC/ESR.  
• Reticulocytes.  
• Renal function.  
• LFTs.  
• Calcium.  
• Immunoglobins and electrophoresis.  
• Urine/Bence-Jones protein.  
• Bone marrow.  
• X-ray of painful areas and skeletal survey.  |
| **Acutely unwell patients secondary to hypercalcaemia, cord compression, renal failure or hyperviscosity require immediate admission – Category 1.**  
**Uncomplicated patients outpatient referral Category 2.** |

| Paraproteinaemia – uncertain significance | Investigations:  
• FBC/ESR/Reticulocytes.  
• Renal function.  
• LFT’s.  
• Calcium.  
• Immunoglobulin and serum electrophoresis.  
• Urine/Bence Jones Protein.  |
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<td><strong>Uncomplicated patients – Category 3.</strong></td>
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