

# Anaemia

- MILD: F 110-95g/L M130-120g/L
- **MODERATE:** F 94-80g/L M119-90g/L
- SEVERE: F<80g/L M<90g/L \*\*\* Phone call to haematology registrar/consultant on call advised\*\*\*

Anaemia is a very common clinical problem. The FMC haematology service provides consultation and/or management of anaemia caused by a primary bone marrow pathology or clinically significant anaemia of unknown aetiology. It is important to note that normocytic normochromic anaemia is rarely secondary to a primary bone marrow disorder and renal causes or early anaemia of chronic disease figure highly in this group.

Information Required	Investigations Required			
Presence of Red Flags	FBE: blood film and reticulocyte count			
Duration of symptoms	<ul><li>Historical FBE assessment</li><li>Full biochemistry</li></ul>			
• Past/Current medical history including current medications				
Dietary history				
Bleeding history				
Transfusion requirements				
Fax Referral to Flinders Medical Centre Haematology Fax: 8404 2152 Red Flags				
	explained fevers/night sweats			
- Weight 1035				
🗖 Bone pain 👘 Lym	phadenopathy / hepatosplenomegally			
Other cytopenia's / cytosis				
Suggested GP Management				

### **MICROCYTIC (MCV<80):**

- Iron deficiency: Referral to gynaecology or gastroenterology as appropriate. Commence iron replacement if dietary or known bleeding source
- Thalassaemia/Haemoglobinopathies screening HB electrophoresis only if <u>chronic</u> microcytosis and normal iron studies with relevant history and/or blood film findings.

### MACROCYTIC (MCV >100):

- suggest exclusion of:
  - Vitamin B12/folate deficiency
  - Drug-induced: Drug history
  - Significant alcohol history
  - liver disease by LFTs assessment
  - hypothyroidism by thyroid function tests
  - Myelodysplasia by requesting blood film review

### NORMOCYTIC (MCV 80-100):

check reticulocyte count

- If the reticulocyte count is increased consider:
- Haemorrhage/acute bleeding
- Haemolytic anaemia: Suggest LDH, Haptoglobin, DAT, Bilirubin and consider a phone call to haematologist on call
- If the reticulocyte count is normal/decreased consider:
- Renal impairment
- Anaemia of chronic disease
- Myeloma: Suggest serum EPG, serum light chains, B2Microglobulin levels, calcium levels and skeletal survey
- Other primary bone marrow disorders including Leukemia, aplastic anaemia or myelodysplasia.

## **Clinical Resources**

**Approach to the adult patient with anaemia,** *Uptodate: <u>http://www.uptodate.com/contents/approach-to-the-adult-patient-with-anemia?source=search\_result&search=anaemia&selectedTitle=1%7E150*</u>

General Information to assist with referrals and the and Referral templates for FMC and RGH are available to download from the SALHN Outpatient Services website <u>www.sahealth.sa.gov.au/SALHNoutpatients</u>



Version	Date from	Date to	Amendment	
1.0	August 2014	August 2016	Original	