



MACROCYTOSIS GUIDELINE

GP REFERRAL GUIDELINE

DEFINITION

Mean corpuscular volume > 100 fl

DIFFERENTIALS

B12 / folate deficiency
Excess alcohol consumption
Liver disease including NAFLD
Cytotoxic drugs (e.g. hydroxycarbamide)
Reticulocytosis
Hypothyroidism
Myelodysplastic syndromes
Myeloma

URGENT REFERRAL

- No obvious indication for urgent referral

NOT MEETING URGENT REFERRAL CRITERIA

- Uncomplicated B12 or folate deficiency does not require referral for haematology outpatient assessment
- Macrocytosis is often evident over many months or even years without progression or obvious illness and with no clear cause. These patients may only need 6 or 12 month checks.

Appropriate assessment/investigation in primary care prior to referral:

- B12 and folate levels (intrinsic factor if B12 deficiency)
- Blood film and reticulocyte count
- LFT and TFTs
- Immunoglobulins and protein electrophoresis
- Drug history (cytotoxics)
- Alcohol history and appropriate lifestyle modification

NON-URGENT REFERRAL

- Suspected myelodysplastic syndrome (based on blood film report)
- MCV >100 fl with accompanying cytopenia (excluding B12/folate deficiency):
 - Hb < 100 g/l
 - Absolute neutrophil count $1.8 \times 10^9/l$
 - Platelets $100 \times 10^9/l$
- Persistent unexplained MCV >104 fl confirmed on repeated FBC over months.