Guidelines for GP referral and further investigation of patients with elevated haematocrit

Criteria for urgent referral for Outpatient assessment

- **Extremely raised haematocrit**
  (Male > 0.600, Female > 0.560) in the absence of congenital cyanotic heart disease
- **Persistently raised haematocrit**
  (Male > 0.510, Female > 0.480) in association with:
  - recent arterial or venous thrombosis
    (including DVT / PE, CVA / TIA, MI / unstable angina, PVD)
  - neurological symptoms
  - visual loss
  - abnormal bleeding

Criteria for referral for specialist opinion

- **Elevated haematocrit**
  (Male > 0.510, Female > 0.480) in association with:
  - past history of arterial or venous thrombosis
  - splenomegaly
  - pruritus
  - elevated white cell or platelet counts
- **Persistent (for more than 3 months) unexplained elevated haematocrit**
  (Male > 0.510, Female > 0.480)

Discharge Policy

- Following completion of investigation, only those cases requiring venesection or cytoreductive therapy will remain under outpatient follow-up
- All other cases will be discharged with a suggested frequency of FBC monitoring and a clearly-stated threshold haematocrit for re-referral

Appropriate investigation in primary care for patients not meeting criteria for urgent referral

- Confirm with repeat FBCs over time (uncuffed blood samples)
- Modify known associated lifestyle factors: smoking, alcohol, consider changing thiazides to non-diuretic anti-hypertensive agents
- Screen for diabetes

NB: Elevated haemoglobin / haematocrit has a wide differential diagnosis including:
Primary proliferative polycythaemia (polycythaemia vera)
Secondary causes (such as hypoxic lung disease and erythropoietin-secreting tumours) and relative polycythaemia resulting from plasma depletion.
Co-existing iron deficiency can sometimes mask the presence of primary polycythaemia

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