

## Haematology – Clinical Guidelines: Leucocytosis – GP Referral Guidelines

### Introduction

Leucocytosis is defined as an elevation of white cell count to  $>10.5 \times 10^9/l$ . It has a wide differential diagnosis ranging from normal response to infection through to haematological malignancies including acute leukaemias. Detection of a leucocytosis should prompt scrutiny of the differential white cell count, other FBC parameters and blood film examination.

### The following should be referred by telephone for immediate haematology assessment:

- New suspected Acute leukaemia
- New suspected Chronic myeloid leukaemia with either:
  - White cell count  $>100 \times 10^9/l$
  - Hyperviscosity symptoms (Headache, visual loss, acute thrombosis)

The duty haematologist will contact the general practice following the results of FBC and blood film examination and arrange urgent patient assessment / admission.

### The following should be referred urgently for outpatient assessment:

- Leucoerythroblastic blood picture (from blood film report)
- New chronic myeloid leukaemia not meeting the above criteria
- Unexplained leucocytosis with white cell count  $>50 \times 10^9/l$

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

- Blood film examination with differential white cell count
- Careful history and assessment for 'reactive' causes: infection, inflammation or neoplasia
- Examination for lymphadenopathy, splenomegaly
- Biochemistry
- Consider CXR

### Referral for specialist opinion should be considered for:

- Persistent (at least on two occasions 4-6 weeks apart) unexplained:
  - White cell count  $>20 \times 10^9/l$
  - Neutrophilia  $>15 \times 10^9/l$
  - Eosinophilia Monocytosis