

Haematology – Clinical Guidelines: Neutropenia – GP Referral Guidelines

Introduction

Neutropenia is defined as a neutrophil count of less than $2 \times 10^9/l$. Please note, that the normal range for Africans/Afrocaribbeans is $1.0-7.0 \times 10^9/l$. Risk of infective complications is closely related to the depth of the neutropenia: a major increase in infections is seen with counts of $<0.5 \times 10^9/l$ while some increased risk of infection is seen with counts of $0.5-1 \times 10^9/l$.

Causes of neutropenia include viral infection, sepsis, drugs, autoimmune disorders and bone marrow failure due to aplasia, malignant infiltration or B12 / folate deficiency.

The following should be referred urgently for outpatient assessment:

- Neutrophil count $< 1 \times 10^9/l$
- Neutropenia in association with:
 - Other cytopenia (Hb $< 100g/l$, Platelets $< 50 \times 10^9/l$)
 - Lymphadenopathy
 - Splenomegaly

Patients with active sepsis in association with unexplained neutropenia $< 1 \times 10^9$ should be discussed with the duty haematologist to arrange appropriate direct assessment.

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

- Blood film examination
- B12 and folate levels
- Autoimmune screen
- Consider discontinuation of potentially precipitating medications
- NB Normal neutrophil count often $<2 \times 10^9/l$ in individuals of Afro-Caribbean or Middle Eastern origin
- Repeat FBC in 4-6 weeks – viral neutropenias are frequently transient

Referral for specialist opinion should be considered for:

- Persistent (at least on two occasions 4-6 weeks apart), unexplained neutropenia $1 - 1.5 \times 10^9/l$