

HAEMATOLOGY

H.A011 ADVICE LEAFLET ON NEUTROPENIA IN ADULT PATIENTS

This advice leaflets excludes patients with neutropenia secondary to chemotherapy. For advice regarding this condition please refer to the acute oncology service. Remember: Neutropenic sepsis is a medical emergency.

What is neutropenia?

severe neutropenia	$<0.5 \times 10^9/L$
moderate neutropenia	$0.5-1.0 \times 10^9/L$
mild neutropenia	$1.0-1.5 \times 10^9/L$

NB People of African or Middle Eastern descent frequently have a constitutional neutropenia (but usually $>1.0 \times 10^9/L$) which does not require monitoring or investigation

What can cause neutropenia?

- Recent viral illness
- Drugs e.g. chemotherapy, carbimazole, carbamazepine, phenothiazines, clozapine, methotrexate
- Auto-immune diseases e.g. rheumatoid disease (Felty's syndrome), SLE
- Idiopathic (probably autoimmune)
- Cyclical neutropenia
- Part of other marrow disease e.g. MDS, aplasia, leukaemia
- Severe sepsis

What should I look out for?

- Fever/signs of infection
- Mouth ulcers
- Recurrent boils
- Record of past FBCs to establish chronicity of neutropenia
- Lymphadenopathy, hepatosplenomegaly

What should I do?

- Review drugs and consider stopping any likely to cause of neutropenia; repeat FBC/blood film two weeks after stopping
- Neutrophils $<1.0 \times 10^9/L$ and patient afebrile and well – repeat FBC/blood film within 7-10 days as neutropenia may be transient.
- Neutrophils $1.0-1.5 \times 10^9/L$ – repeat FBC/blood film in 4-6 weeks to see if self-limiting or progressive. If neither, repeat again in 3 months to see whether progressive.
- Autoantibody screen.

When should I refer?

Refer to AMU as a medical emergency if neutrophils $<0.5 \times 10^9/L$ and temp. $38^\circ C$ or above, or any other signs of infection. Treat as neutropenic sepsis on arrival.

Consider written referral to Haematologist if neutrophil count falls to $<0.5 \times 10^9/L$ on repeat FBC, but patient well and on no incriminating drugs or if patient develops anaemia or thrombocytopenia. Many patients with neutropenia do not require intensive investigation.