

HAEMATOLOGY ADVICE LEAFLET

H.A010 – Isolated neutropenia in adult rheumatology patients

What is neutropenia?

severe neutropenia	<0.5 x 10 ⁹ /L
moderate neutropenia	0.5-1.0 x 10 ⁹ /L
mild neutropenia	1.0-1.5 x 10 ⁹ /L

NB People of African or Middle Eastern descent frequently have a constitutional neutropenia (but usually >1.0 x 10⁹/L) which does not require further monitoring or investigation

What can cause neutropenia?

- Auto-immune neutropenia
- Bone marrow disorder (e.g. myelodysplasia, marrow aplasia)
- Drugs e.g. disease modifying anti-rheumatic drugs, cytotoxics
- Felty's syndrome
- Idiopathic
- Large granular lymphocyte disease
- Severe sepsis
- Recent viral infection

What should I look out for?

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

What should I do?

Admit as medical emergency if neutrophils <1.0 x 10⁹/L and temperature 38°C or above, or any other signs of infection and treat as for neutropenic sepsis. Consider administering folinic acid if patient has been on methotrexate.

Neutrophils <0.5 x 10⁹/L and patient well

- Stop drugs if likely cause of neutropenia; repeat FBC/blood film in 2 weeks.
- If not on drugs likely to cause neutropenia, repeat FBC/blood film within 7-10 days.
- Give patient advice about monitoring temperature.

Neutrophils 0.5-1.5 x 10⁹/L and not on drugs likely to cause neutropenia

- 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.

Consider seeking Haematology advice if:

- Neutrophil count remains $<1.0 \times 10^9/L$ on repeat FBC after potentially incriminating drugs stopped for 2 weeks.
- Neutrophil count falls below $1 \times 10^9/L$ on repeat FBC and not on drugs likely to cause neutropenia.
- Signs/symptoms of other haematological disease present or other cytopenias develop.

Starting or continuing drugs which may cause neutropenia

This is a decision which needs to be made by Rheumatology based on the benefits of the drug balanced against the level of neutropenia - **a bone marrow examination is unlikely to predict if further neutropenia will occur.**