

Neutrophilia

Definition

Neutrophilia is defined as an absolute neutrophil count $>7.7 \times 10^9/l$

Causes

1. Infection
2. Inflammation (trauma, infarction, autoimmune disorders)
3. Pregnancy
4. Physical agents (vigorous exercise, burns, labour, anaesthesia)
5. Malignancy
6. Cigarette smoking
7. Hyposplenism
8. Chronic bleeding
9. Drugs (G-CSF, adrenaline, corticosteroids, lithium)
10. Chronic idiopathic neutrophilia
11. Myeloproliferative neoplasms (MPN) such as CML, PRV, Myelofibrosis
12. Myelodysplastic syndrome

Investigation

History and examination to elucidate whether there are secondary causes for the neutrophilia (points 1-9 above).

First line investigations should include:

- Blood film
- CRP
- Autoimmune profile
- Pregnancy test in women

Management

Management should be according to the underlying cause.

Referral to Haematology



*South West Strategic Clinical Network
Somerset, Wiltshire, Avon and Gloucestershire (SWAG) Cancer Services*

Features suggestive of a primary haematological aetiology warranting referral include:

- Weight loss, sweats, fevers
- Associated splenomegaly
- Leucoerythroblastic blood film (left shifted neutrophilia with nucleated red cells. Indicates marrow infiltration).
- Blasts on blood film
- Associated basophilia/eosinophilia/thrombocytosis/erythocytosis

References

Best Practice. BMJ. Assessment of Neutrophilia.

<http://n3.bestpractice.bmj.com/best-practice/monograph/1023.html>