

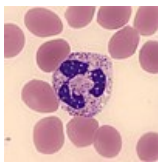
Leukocytosis

Definition and distribution

Leukocytosis is an **increased number** of leukocytes in a person's blood. It can be caused by a reactive (secondary) or malignant cause. Depending on the type of leukocyte, we recognize the following types of white line defects, which are also causes of leukocytosis:

- **Neutrophilia** – an increase in the absolute number of neutrophils in the peripheral blood above the limit of $7.5 \times 10^9/l$.
- **Lymphocytosis** – an increase in the number of lymphocytes in the peripheral blood above the limit of $4.5 \times 10^9/l$.
- **Basophilia** – an increase in the number of basophils in the peripheral blood above the limit of $0.1 \times 10^9/l$.
- **Monocytosis** – an increase in the number of monocytes in the peripheral blood above the limit of $0.8 \times 10^9/l$.
- **Eosinophils** – an increase in the number of eosinophils in the peripheral blood above the limit of $0.25 \times 10^9/l$.

Causes of leukocytosis

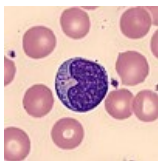


Neutrophil

Neutrophilia

Neutrophilia can be caused by a number of causes. These causes include:

- infection (bacterial, fungal, spirochete and others),
- inflammation (vasculitis and others),
- physical exertion, pregnancy,
- severe metabolic acidosis (diabetic ketoacidosis),
- smoking

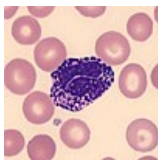


Lymphocyte

Lymphocytosis

Lymphocytosis is usually caused by an acute viral infection or a chronic infection. Other various causes include:

- malignancies (leukemia and lymphomas),
- injuries
- excessive physical exertion
- stress lymphocytosis (after a myocardial infarction or with lymphocytosis after adrenaline).

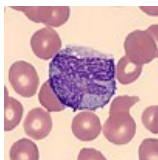


Bazophil

Bazophilia

Most of the causes of basophilia are life-threatening, which is why early diagnosis and then prompt treatment are important. These causes include:

- inflammatory disease (ulcerative colitis and others),
- medications (e.g. estrogens and others),
- irradiation,
- hyperlipidemia

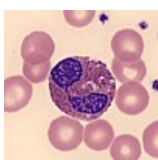


Monocyte

Monocytosis

The causes of monocytosis also usually include life-threatening conditions, early diagnosis and then quickly started treatment is important. Such causes include:

- infection (malaria, trypanosomiasis),
- tuberculosis,
- typhoid,
- Hodgkin's lymphoma,
- hemolytic anemia.



Eozinophil

Eozinofilia

Eosinophilia can be caused by:

- allergic reaction,
- parasitic disease
- condition after infectious mononucleosis

Diagnose

Leukocytosis is detected as part of a differential blood count examination.

Links

Related articles

- Neutropenia
- Lymfocytopenia
- Leukopenia

External links

- Changes in blood count and hemocoagulation during pregnancy (<https://www.levret.cz/publikace/casopisy/mb/2007-14/?pdf=23>)

Bibliography

- DZÚRIK, Rastislav. *Štandardné terapeutické postupy*. 1. edition. Osveta, 1997. ISBN 80-217-0465-9.
- DOBROTOVÁ, Miroslava, et al. *Hematológia a transfuziológia : učebnica*. 1. edition. Grada ; Bratislava : Grada Slovakia, 2006. ISBN 80-8090-000-0.