Essential thrombocythemia

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Essential thrombocythemia, is caused by pathological monoclonal hematopoiesis , which is manifested by increased number of platelets. These platelets are dysfunctional and, in addition to the risk of microthrombosis, they can also cause bleeding conditions.

Patogenesis

Thrombocytes

Pathological monoclonal hematopoiesis in the bone marrow is characterized by an increased number of megakaryocytes and megakaryoblasts.

Platelets may have reduced sensitivity to thrombopoetin and therefore we register elevated levels of thrombopoetin , which secondarily causes increased formation of megakaryoblasts and megakaryocytes.

Platelets are dysfunctional, which causes bleeding conditions.

Signs and symptoms

- thrombosis
- bleeding conditions

Prognosis

Essential thrombocytosis can progress to acute myeloid leukemia (in 3-4% of cases).

Related articles

- Neonatal Thrombocytopenia
- Thrombocytopenia
- Erythropoiesis
- Thrombocytes

Bibliography

- NEČAS, Emanuel. *Patologická fyziologie orgánových systémů : Část I.* 2. edition. Karolinum, 2009. pp. 379. ISBN 978-80-246-1711-4.

- NEČAS, Emanuel – ŠULC, Karel – VOKURKA, Martin, et al. *Patologická fyziologie orgánových systémů. Část I.* 1. edition. Karolinum, 2006. pp. 0. ISBN 978-80-246-0615-6.