THROMBOCYTOPENIA

DEFINITION

- 1. **Thrombocytopenia** is a condition of reduced platelet count arising by means of one of three mechanisms
 - 1.1. failure of megakaryocyte maturation.
 - 1.2. excessive platelet consumption after their release into the circulation.
 - 1.3. platelet sequestration in an enlarged spleen.

CLINICAL FEATURES

2. Purpura and spontaneous bruising are characteristic, but there may also be oral, nasal, gastrointestinal or genito-urinary bleeding. Spontaneous bleeding does not usually occur until the platelet count falls below 30 x 10.9/l unless the platelet function is also compromised – e.g. following aspirin ingestion.

AETIOLOGY

3. The known forms of thrombocytopenia are -

3.1. Marrow disorders

- 3.1.1. hypoplasia as a consequence of certain drugs (especially cytotoxic drugs) or ionizing radiation.
- 3.1.2. infiltration of the marrow in such conditions as leukaemia, myeloma, myelofibrosis and carcinoma. The aetiology is that of the underlying condition.

3.2. Increase consumption of platelets

- 3.2.1. idiopathic thrombocytopenic purpura. In at lease 85% of cases, an immunological mechanism involving igG-type antibodies can be demonstrated.
- 3.2.2. certain bacterial or viral infections (Epstein-Barr virus and Human immunodeficiency virus).

3.3. Hypersplenism

- 3.3.1. lymphoma. The aetiology is that of the underlying condition.
- 3.3.2. liver disease. The aetiology is that of the underlying condition.
- 4. Sometimes marrow hypoplasia is **idiopathic**, the aetiology then being unknown.

CONCLUSION

5. **Thrombocytopenia** is a condition of reduction of platelets in the blood stream. The condition may be secondary to various other conditions which have been listed above, the aetiology then being that of the underlying condition, or may be idiopathic, the aetiology then being unknown.

REFERENCES

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February 1995