SPLENOMEGALY
CAUSES AND INVESTIGATIONS

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The causes of splenic enlargement may be grouped as follows:—

INFECTION:
- Undulant fever.
- Typhoid fever.
- Typhus fever.
- Kala-azar.
- Acute malaria.
- Glandular fever.
- Miliary tuberculosis.
- Bacterial endocarditis.
- Congenital syphilis.
- Septicaemia.
- Splenic abscess or infarction.

BLODD DYSCRASIAS:
- Acute myeloid and lymphatic leukaemia.
- Chronic myeloid and lymphatic leukaemia.
- Pernicious anaemia.
- Polycythemia vera.
- Cooley's anaemia.
- Haemolytic anaemia.
- Hodgkin's disease.
- Acholuric jaundice.
- Thrombocytopenic purpura.
- Splenic anaemia (Portal hypertension).
- Sickle-cell anaemia.
- Osteosclerotic anaemia (marble-bone disease, myelosclerosis) Rare.

DISORDERS OF LIPID METABOLISM:
- Niemann-Pick's disease.
- Gaucher's disease.
- Hans-Christian — Schuller disease.
- Xanthomatosis.

INTERFERENCE WITH CIRCULATION (Congestive splenomegaly)
- Portal vein thrombosis.
- Splenic vein thrombosis.

METABOLIC DISTURBANCE:
- Rickets and other deficiency states of childhood.

DIAGNOSTIC PROCEDURE IN THE INFECTIVE GROUP, USUALLY ACUTE ONSET WITH FEVER.

1 History: Present and past, family. Racial origin. ? Chorea; ? Rheumatic fever. ? Malaria. ? Drinking raw goat's milk.
2 Onset of disease: Acute? Insidious?
3 Appearance of pt: Compare typhoid and undulant. ? Rose spots. ? Petechiae. ? Cardiac murmurs.
4 Study type of fever. Search for enlarged glands.
5 White cell count is important — compare undulant, typhoid and endocarditis.
6 Blood smear — diagnostic in Glandular fever showing atypical lymphocytes — and in malaria.
7 B.S.R. and Paul-Bunnell test (Glandular fever).
8 Blood culture is valuable in Undulant, typhoid and endocarditis.
9 Splenic puncture or bone marrow puncture to exclude or confirm Kala Azar.

DIAGNOSTIC PROCEDURES IN THE CHRONIC FORMS OF SPLENOMEGALY

A. 1. Adult with enlarged spleen and a vivid red colour think of polycythaemia and confirm by blood count.
2. Pale clay colour with enlarged spleen and past history of living in malaria districts together with febrile episodes think of malaria.

3. Dirty yellow colour of skin especially around nose and eyes in a patient who since infancy had splenomegaly think of Gaucher's disease.
4. Mongolian aspect with pale yellow colour of skin and big head in a patient with chronic splenomegaly and of Mediterranean origin think of Cooley's anaemia.
5. An aspect characterised by cranial malformation with sub-icteric tinge of the skin in an individual with moderate splenomegaly makes one suspect haemolytic jaundice.

B. *Age of patient.*
This may have an important bearing in the diagnosis especially for those splenomegalies that occur only in childhood e.g. Cooley's anaemia, Niemann-Pick disease, Gaucher's disease.

C. *Fever.*
This is of more importance in the acute types of splenomegalies. It does, however, help much in the diagnosis of chronic splenomegalies:—
a) Episodes of fever with crisis of haemolysis points to haemolytic anaemia.
b) Fel-Ebstein type, suggests Hodgkin's disease.
c) Febrile episodes which coincide with fleeting icterus and ascitic manifestations in an individual with chronic splenomegaly makes one suspect splenothrombophlebitis.
d) Malarial type of fever with rigors think of chronic malaria.
e) The presence of fever excludes such diseases as Osler-Vaquez; chronic myeloid and lymphatic leukaemia; Cooley's anaemia; Gaucher's disease, Niemann-Pick's disease.

D. *Gastro-Intestinal haemorrhages.*
Haematemesis and malaria point to hepatic cirrhosis, congestive splenomegalies and Banti's syndrome.

E. *Jaundice.*
The presence of jaundice would point to a diagnosis of Hanot's cirrhosis or haemolytic jaundice.

F. *Ascites.*
If permanent think of Laennec's cirrhosis; Banti's syndrome. If transient think of Splenothrombophlebitis.

G. *Liver.*
With enlargement of liver think of syphilis, TB, Malaria.

H. *Enlarged glands.*
Suspect lymphatic leukaemia or Hodgkin's disease.

I. *Blood picture.*
This is diagnostic. It is most important in Leukaemias, pernicious anaemia, polycythaemia, and sickle cell anaemia.

J. *Splenic puncture.*
May furnish typical findings in Gaucher's disease.

K. *Bone marrow biopsy.*

L. *Urinalysis.*
This may reveal RBC's or Urobilinogen. It is important in the haemolytic anaemias.

M. *RBC Fragility.*
Important in haemolytic anaemia.

N. *Bleeding and clotting time.*

O. *Lymph-node biopsy.*

P. *X-Ray evidence.*
May reveal the bone lesions in Cooley's anaemia; multiple myelomas and Gaucher's disease.

Q. *Thorium splenography.*