Splenomegaly

Summary

- The spleen removes old and abnormal blood cells and contributes immune system components, including antibodies.
- Splenomegaly means enlargement of the spleen.
- Some of the many causes of splenomegaly include leukaemia, lymphoma, Hodgkin’s disease, glandular fever and malaria.
- Treatment depends on the cause.

Splenomegaly means enlargement of the spleen. The spleen is located on the left side of the abdomen. It can be considered as two organs in one, since it:

- Filters the blood and removes abnormal cells, such as old and defective red blood cells.
- Produces disease-fighting components of the immune system, including antibodies and lymphocytes.

The healthy adult spleen weighs around 200g. However, a variety of disorders can cause the spleen to enlarge, sometimes to 2kg or more. Any conditions that cause a rapid breakdown of blood cells, such as any of the haemolytic anaemias, can place great strain on the spleen and make it enlarge. Other causes of splenomegaly include infections, liver disease and some cancers.

Symptoms of splenomegaly

Symptoms of splenomegaly include:

- Enlarged spleen, which can be felt by palpating the abdomen
- Other symptoms, depending on the cause.

Causes of splenomegaly

Since the spleen is involved in so many bodily functions, it is vulnerable to a wide range of disorders. Some of the causes of splenomegaly include:

- **Cirrhosis of the liver** – which can increase the blood pressure inside the vessels of the spleen.
- **Cystic fibrosis** – a genetic disorder, characterised by excessive mucus production, particularly in the lungs and pancreas.
- **Cytomegalovirus** – a common viral infection that causes mild, flu-like symptoms.
- **Glandular fever** – an infection caused by the Epstein-Barr virus.
- **Haemolytic anaemias** such as thalassaemia, a genetic disorder that affects the production of the oxygen-carrying protein in red blood cells (haemoglobin).
- **Hodgkin’s disease** – cancer of the lymphatic system.
- **Leukaemia** – cancer of the bone marrow that affects the blood cells.
- **Lymphoma** – cancer of the lymph nodes of the lymphatic system.
- **Malaria** – a parasite transmitted to humans by the bite of infected mosquitoes.

Diagnosis of splenomegaly

Diagnosing splenomegaly involves a number of tests, including:

- Physical examination
- Ultrasound or abdominal x-ray
- Computed tomography (CT) scan
• Blood tests, to check for underlying disorders.

**Treatment for splenomegaly**

Treatment for splenomegaly depends on the underlying condition. For example, radiation therapy and chemotherapy may be used to treat cancers, while regular blood transfusions are needed to manage thalassaemia.

**Ruptured spleen**

Certain disorders, including glandular fever, can occasionally make the enlarged spleen delicate enough to rupture. A person with splenomegaly should take care to avoid all contact sports and any other activities that could potentially deliver a hard impact to their abdomen. An overzealous palpation of the abdomen or a sudden blow can split the outer capsule of the spleen and cause bleeding into the abdominal cavity. In this instance, surgery to remove the spleen (splenectomy) is needed. The body seems to cope without the spleen, despite this organ’s many vital functions. However, the person may find they have an increased susceptibility to infection following the operation. Their blood may also contain odd-shaped red blood cells. In some cases, it may be possible to leave healthy portions of spleen intact, and only remove the diseased or damaged parts. This allows the spleen to keep performing its usual functions.

**Where to get help**

• Your doctor
• Alfred Hospital - Victorian Spleen Registry