

Splenectomy

What is the spleen

The spleen is an organ situated in the upper left side of the abdomen under the rib cage. The normal spleen is about the size of a person's fist. The primary function of the spleen is to filter and remove bacteria and dead blood cells from the blood stream. The spleen also produces antibodies. Surgical removal of the spleen is known as splenectomy.

How common is splenectomy?

Splenectomy is a common surgical procedure. Approximately 30-50 splenectomies are performed annually in the ACT and there are around 1000 people in the ACT who have had a splenectomy.

Why do some people need to undergo splenectomy?

There are three main reasons for splenectomy. These reasons happen in roughly equal proportions.

- The first (and most well-known) reason is due to a traumatic injury to the spleen. This may occur in a motor vehicle accident, when someone falls off a bicycle or is hurt playing a contact sport. In these situations, surgeons generally attempt to preserve the spleen rather than remove it.
- The second reason is a 'surgical' one, which refers to the occasional situation where a surgeon must remove the spleen in order to get to the other organs, such as the stomach or pancreas. This mainly occurs in elective surgery for various types of cancer.
- The third reason pertains to various 'haematological' (blood) conditions, where removal of the spleen may be necessary for treatment of the underlying condition. Common examples of these conditions include immune (idiopathic) thrombocytopenic purpura ('ITP') and hereditary spherocytosis.

Post-Splenectomy Sepsis

What is post-splenectomy sepsis?

Post-splenectomy sepsis (PSS) is a serious life-threatening condition. The body becomes overwhelmed by a bacterial infection. The absence of a spleen means the body's immune system may not respond quickly enough to certain types of infections.

If you have a fever/increase in temperature you must see a doctor.

Suspected PSS is a medical emergency and you should always report to a doctor or hospital emergency department urgently.

What is the risk of post-splenectomy sepsis?

All people who have had a splenectomy are at risk and this remains throughout life. The risk is greatest in the first 2-3 years following splenectomy but also may gradually increase in old age.

Overall, the lifetime risk that a particular individual will develop PSS is generally low, probably because other organs in the body (particularly the liver, lymph glands and other lymphoid tissues) eventually take over part of the function of the spleen.

What types of infections can occur?

People who have had a splenectomy are at risk of serious bacterial and parasitic infections. The most serious bacterial infections include meningitis (brain infection) and septicaemia (blood poisoning).

Septicaemia may occur following infections of wounds, ulcers, and animal bites, and also as a complication of other infections such as pneumonia or cellulitis. The most important bacterial germ that may cause these infections is pneumococcus (*Streptococcus pneumoniae*). This germ is a common cause of pneumonia in the general community but may cause more serious illness in people who have had a splenectomy.

In addition, viral infections such as influenza may increase the risk of someone developing a bacterial infection.

People who have had a splenectomy may be at greater risk of contracting malaria while travelling in regions where this disease occurs, e.g. (tropical or developing countries). If you intend travelling to countries where malaria is present you should discuss your travel plans with a doctor experienced in travel medicine. You may be advised not to travel to that country.

Your risk of getting these common infections is not increased because you have had a splenectomy:

- coughs & colds,
- gastroenteritis (vomiting & diarrhoea), and
- urinary tract infections.

Recommendations:

- You may be told to take long-term antibiotics to protect against PSS. If you are not taking antibiotics you may be given a single high dose of an antibiotic to be taken immediately if you should get a fever.
- You should wear either a 'medical alert' bracelet/pendant or carry a card in your wallet or purse indicating that you have had a splenectomy. Bracelets and pendants (including styles that may appeal to younger people) can be ordered and purchased through various websites.

Further Advice

The infectious diseases physicians of The Canberra Hospital are available for consultation (Appointments: 6244 2105) if further specialist advice or care is needed.