

# Injuries to your Spleen

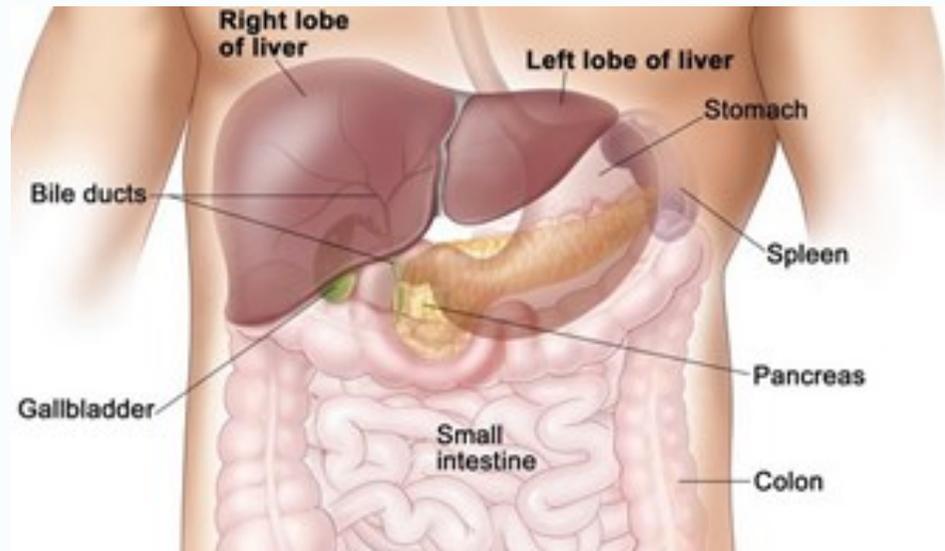
This information was compiled by the  
Trauma Service, Auckland City Hospital  
August 2021



The Spleen is a small soft organ shaped like a kidney which lies above the stomach. It is protected by the ribs on the lower left side of the chest. In the body it has 2 main roles:

— helping with immunity & as a blood filter.

The spleen is part of the body's immune system & helps to detect any dangerous germs in the blood e.g bacteria or viruses. It will help to make extra white blood cells, called lymphocytes, that then produce antibodies, to kill these germs & stop infections from spreading.



The spleen mainly acts as a filter for the blood. As blood flows into the spleen, it passes through narrow passages on the inside. Healthy blood cells pass easily, but old or damaged red blood cells are trapped & broken down. The spleen will store useful leftover products from this process, such as iron, so this can be reused in new cells. Iron is what the body needs to make new red blood cells & allows these cells to carry oxygen throughout our body.

## After discharge home

### See your GP about a week after you leave hospital.

He/she can monitor your progress & arrange any further blood tests. Along with ACC, your GP will assist in your return to work or if needed arrange further community supports.

If vaccinations are needed, follow arrangements will be arranged by your GP.

For about 8 weeks after your injury, don't push or pull anything heavy & avoid lifting heavy objects. If you have to make an effort to pick something up - it's too heavy.

**RETURN TO SPORT:** You are advised not to return to vigorous physical exercise or sport for 3-6 months to allow your spleen to fully heal.

If needed the Trauma team will arrange a follow up outpatient clinic appointment

**If you get new abdominal pain or increasing dizziness, in the two weeks following injury or surgery to your spleen:**

**contact your GP immediately  
or if necessary Dial 111 for an ambulance**

### How long will you be in hospital?

This depends on how much your spleen was injured, whether your spleen was removed, or if you have other injuries.

Eating well, being comfortable to move about freely with little pain & having stable blood tests, are good signs you are ready to go home.

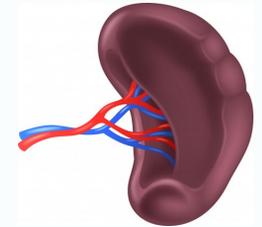
Sometimes after an injury to the spleen, the stomach feels full & bloated after eating & your appetite may be less than usual. Try having small snacks more often rather than eating a full meal 3 times a day.

Drink plenty of fluids, especially water. It is very easy to get constipated on the pain medicines & while you are eating less. Your appetite will return to normal as you improve.



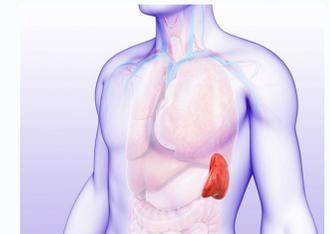
Up to a third of the body's supply of platelets are stored in the spleen. Platelets are needed for blood clotting. If severe bleeding occurs, the spleen will release extra platelets, to help slow it down. Old used up platelets are also filtered out of the blood stream by the spleen. The spleen is able to increase in size in order to store blood & will widen or narrow, depending on the body's needs. At its largest, the spleen can hold up to about a cupful of extra spare blood.

The spleen



### Damage to your Spleen

The spleen can be damaged by a direct blow to the abdomen or chest, as in road crashes, sporting injuries, an assault or a fall. The spleen can be lacerated (torn) or crushed & will often have signs of bleeding around it called a haematoma or bruise.



### Diagnosing an injury of the Spleen

An abdominal CT scan will identify a splenic injury. Sometimes an emergency operation is required to control bleeding, remove the badly damaged spleen & a diagnosis is made then. As much as is possible, surgery will be avoided *for reasons explained later in this booklet.*

The majority of spleen injuries do not need surgery & bleeding often stops by itself. But this will depend on how severe the injury is.

## Treatment for a Splenic Injury

- ◆ Bedrest initially, then slowly increasing how much you can move about e.g just getting up for the bathroom to being able to go for a reasonable walk
- ◆ Good pain medication, either by mouth or intravenously (IV) or a combination of both. If needed, a PCA (patient controlled analgesia) will be arranged for you. This device means you give your own pain relief when you need it.



- ◆ Frequent monitoring for early signs of re-bleeding by taking your blood pressure & heart rate regularly.
- ◆ Daily blood tests to check blood counts. Once stable these can be less often.



If needed, eating & drinking may be restricted to start with  
– then you will be given intravenous (I.V) fluids.



## Healthcare team members who you may meet during your stay in hospital

**Nursing & Medical staff** – will monitor you & support your recovery & arrange any investigations (x-rays &/or blood tests).

**Trauma Nurse Specialist**— will ensure your care is co-ordinated, especially if you have other injuries. They can give you & your whanau extra advice while in hospital, assist in planning for a safe discharge & any support you may need with initial ACC queries.

**Acute Pain service** – can assist in managing your pain if needed.

**Dietician**— can monitor your ability to eat well & assist if needed

**Physiotherapist** – to assess & monitor your progress with deep breathing & coughing exercises, to assist with mobility to prevent complications & enhance your recovery.

**Occupational Therapist**—to monitor your recovery if you hit your head, to ensure you are safe for discharge & provide any equipment you might need at home.

**Social worker** – available for support, arranging community support services or counselling should you require them. Please ask.

**Maori & Pacifica support** —please ask if you wish this service to visit

**Older Persons Health** doctor—will visit you if you are 75 years or over

**Health Psychologist**— available for counselling. Please ask the ward staff if you need this service.

If you have any questions—Please ask our team

## ***This page only applies if you have had your Spleen removed***

### **Further Advice:**

If you have an underlying health condition, are immunosuppressed, or having chemotherapy— then taking a course of precautionary antibiotics may be beneficial. You can discuss this with your GP

People who live in rural areas or those who live more than 30minutes away from emergency medical centres should have a supply of in-date stand-by antibiotics at home with instructions on how to take them, if the following new symptoms are experienced:

- sudden onset of unexplained fever, feeling unwell, chills or shakes, rashes
- on-going signs of infection (eg sore throat, headache, joint pains & flu-like symptoms)



Getting *early* medical care, even with the use of stand-by antibiotics, is essential.

**Don't wait till tomorrow! You may need an urgent medical care.**

Especially when infection is suspected.

Keeping vaccinations up to date including a yearly Flu vaccine is important

If you are planning to travel overseas, please see your GP for advice on further possible vaccinations.

If you have had your spleen removed, it is highly recommended that you get a Medic Alert® bracelet to provide 24hr emergency information about you, when you may be too unwell to do it yourself. The bracelet also provides instant visual recognition of a potential health issue.

Website: [www.medicalert.co.nz](http://www.medicalert.co.nz)

## **What happens if your spleen keeps bleeding :**

If your spleen keeps bleeding but is not immediately life threatening, a specific CT scan may be done to see where the site of bleeding is.

This is called an Angiography of the spleen, where x-ray dye is given to highlight any bleeding blood vessel. If one is found, a further special x-ray procedure is done.

This is called an Embolisation.

Embolisation is the deliberate blocking off of a blood vessel with either a tiny specialised coil (about 2-10mm wide) or clotting foam.

Coils have very very small strands on them to attract platelets & help form a clot, so that bleeding slows then stops. These coils stay in the body permanently. If foam is used, this will slowly dissolve after about 2 months, giving time for the blood vessels to heal.

This procedure is done by a Radiologist (X-ray doctor) & will be fully discussed with you beforehand.



You may have a repeat CT scan or ultrasound scan to check on how well the spleen is recovering before you are discharged.

The vast majority of people have no side effects after injuring the spleen or having an embolisation.

Rarely, the spleen does not respond to treatment & surgery is needed to stop any ongoing bleeding.

*This page only applies if you have had your Spleen removed*

### **Surgery to remove your Spleen**

As much as possible, surgery to remove a damaged spleen will try to be avoided. However, if your abdominal pain is increasing or your blood tests, heart rate or blood pressure recordings become unstable, this may be necessary. This operation is called a Splenectomy & will be discussed with you.



The majority of people have no side effects after spleen removal, but it is important to understand that you will now have a higher life-long risk of getting infections.

In some rare cases, people without a spleen can suffer life threatening infections over a very short time. This condition is called :  
Overwhelming Post-Splenectomy Infection (OPSI).

To reduce this risk, you will be offered & given special vaccinations 14 days after surgery. This may either be while you are still in hospital or by your GP.

If you have damaged your spleen & not had surgery to remove it, you do not need these vaccinations.

*This page only applies if you have had your Spleen removed*

### **Vaccinations:**

These three vaccines help protect against the bacteria called: Streptococcus pneumoniae, Neisseria meningitidis & Haemophilus influenzae.

Streptococcus pneumoniae is a common cause of Pneumonia

Neisseria meningitidis causes Meningococcal meningitis

Haemophilus influenzae causes Pneumonia, as well as throat & ear infections.



Your GP will assist you with follow up vaccinations approximately 8 weeks after the first ones given & then repeated again 1 or 5 years later.

You are strongly advised to also get a yearly Influenza vaccine for added protection.

This information is guided by the Infectious Diseases specialists at Auckland Hospital & is also available on the NZ Ministry of Health website - [www.moh.govt.nz](http://www.moh.govt.nz)