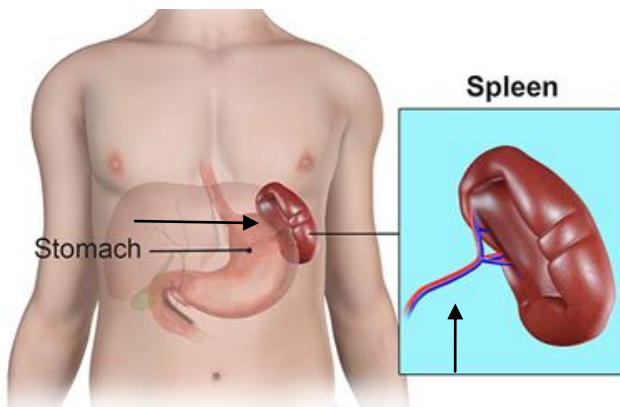


Discharge advice for adult patient who have sustained a splenic injury and underwent a successful treatment for spleen salvage



A. Location of the spleen, B. The main splenic vessels (artery and vein)

What is the spleen?

The spleen is a multifunctional organ that sits in the upper left part of your abdomen under your lower ribs and left diaphragm.

The roles of your spleen, which weighs only 150 g however it has a huge amount of blood (200 mL per minute, i.e. one full glass) running through it.

The spleen's role includes removing old red blood cells from your blood stream, stores blood reserves and also destroys various microbes from your blood.

The latter function of the spleen is a critical component of the defence system of the body as the clearance of blood-borne bacteria occurs primarily within this organ.

How is the spleen injured?

Injuries to the spleen can be as a result of intentional or unintentional, blunt or penetrating injury to the stomach or left

lower chest, resulting from sudden external energy.

The spleen is the second most common organ in the abdomen to be most frequently injured after sustaining a blunt injury to the abdomen – 32% of abdominal injuries.

The liver has the highest injury percentage – 36% of abdominal injuries.

What is a non-operative management of an injury to the spleen?

It is a non-surgical management of an injury to the spleen. This means your team will monitor your vital signs and bloods to look for any signs of bleeding. You also may undergo more than one CT scan to monitor your injured spleen.

However, there will be times when non-operative managed patients will require to undergo specialist intervention in x-ray, where by a wire is inserted into their groin.

Under x-ray guidance so that the area of bleeding can be stopped using specialist coils, this is referred to as 'Embolization' performed in interventional radiology.

Currently, non-operative management is a common practice for adult patients and children who have sustained a spleen injury.

Whilst you were in the Major Trauma Centre, we closely observed you, monitored your blood pressure, heart rate and blood count for signs of possible bleeding and other complications related to your injury.

Now you are ready to be discharged from hospital. However remember that your spleen has not healed yet.

Discharge advice following a spleen injury is a particular component of a further non-operative management for patients who sustained a blunt splenic injury.

The first 24 hours post discharge

You should be accompanied by a responsible adult on returning home from the hospital that can stay with you for at least 24 hours.

Some symptoms can be normal following an injury to the spleen

Your full recovery depends on the severity of injury to the spleen and on the volume of blood and blood clots inside or outside the spleen.

Most people recover quickly from minor splenic injuries, however, you may experience some of the following symptoms over the next few days and weeks especially if you sustained moderate or serious injuries to the spleen.

They do not require a return to hospital but you should be aware of them. These symptoms are as follows:

- mild pain in your tummy,
- mild pain above the left collar bone or left shoulder,
- Intermittent nausea,
- Mild tummy distension,
- Mild elevation of body temperature.

Some discomfort around belly button or in left side of the tummy is normal following injuries to the spleen.

However, if symptoms are constant or if they are increasing you should seek advice from:

- Your GP,

- Major Trauma Nurse Coordinators,
- Nursing staff on Major Trauma Ward.

You may also contact the secretary of your consultant and leave a message for the surgical team.

If you think that your condition is serious then it is best to come straight to Aintree Accident & Emergency department.

When should you return to hospital?

We know that most people recover well from an injury to the spleen and they do not experience complications.

However, you should bear in mind that there always is a risk of developing complications after every injury to the spleen, either minor or major. That would mean that:

- You have to return to A&E or Major Trauma Centre at once if left upper stomach pain begins suddenly or worsens, or general weakness, dizziness, or any fits, i.e. collapsing or passing out suddenly, occur. Sudden vomiting is also a sign of an emergency condition.
- You should also return to A&E or Major Trauma Centre if you look pale.
- You should return to A&E or Major Trauma Centre if you suffer from spikes of fever, rigors, shivering or chills, for this may be the signs of infection.

What are possible complications of non-operative management of injury to the spleen?

- Recurrent bleeding
- Collection of blood
- Abscess of the spleen or around it

- Cyst of the spleen
- Fluid collection within the chest
- Chest infection
- Blood clots in the veins of legs or the lungs

The risks of complications increase for the elderly, people who are overweight or for those who already have liver, lungs or other chronic medical conditions such as diabetes or kidney failure.

The risk of complications also corresponds with the grade of injury.

If complication occurs, you will be admitted to the Major Trauma Centre for further complication-specific treatment.

Preventing complications

Repeated trauma to the fragile and healing spleen could lead to sudden bleeding. Until informed otherwise we advise you not to:

1. work for, at least, two weeks
2. go to school, college, or university for, at least, two weeks.
3. drive for four weeks; you must inform the DVLA of your injury who may also advise you in regards to when you can drive.
4. physical activity for six weeks (including physical education).
5. No strenuous physical activities for, at least, 12 weeks (three months).

These activities include skiing, skating, mountain biking, diving, skydiving, contact sports, military combat, rigorous sexual intercourse, and lifting of heavy objects.

For very specific groups of patients the interval of limited activity can range from three months to one year (this will be discussed with you prior to your discharge)

It is important that you do not miss any of your follow up appointments

Your surgeon will inform you prior to discharge if you will require a follow up in our Major Trauma or Emergency General Surgery Clinic to ensure that your injury is healing and for us to also monitor how you as a whole are recovering from your injury.

A follow up CT scan may be necessary before your appointment, but this is not always the case for tiny splenic injuries.

If a surgeon decides that a CT-scan for your spleen is necessary, you will receive an appointment letter from the department of radiology with the date and particular instructions.

Results of a CT scan will be discussed in your follow up appointment.

Pain control

Painkillers will be prescribed for you for about 5 – 10 days.

They may well cause constipation, so it's important to get plenty of fibre in your diet while you are recovering. Fresh fruit and vegetables will help to keep your bowels moving regularly.

Whilst at home

Try to keep a normal daily routine. Get up at your normal time in the morning, get dressed, and move about the house.

As you build up your routine activities, you may feel more tired than normal. If so, stop and rest until your strength returns.

If you feel pain, you have probably just overdone it a little. Ease back and then gradually increase again.

If you are concerned, consult your GP or Major Trauma Nurse Coordinators.

Eat a healthy diet. Do not smoke. Keep social contact with people talk to your friends, neighbours, relatives, and co-workers. This will help you recover more quickly.

Employment

Getting back to your normal work routine sooner rather than later can actually help you to recover more quickly.

People whose work involves a lot of heavy lifting, or standing up or walking for long periods of time, will not be able to return to work as quickly as those who have office jobs which are less demanding physically. This will help you recover more quickly.

Test your fitness to drive

You should speak to the DVLA prior to attempting to drive. Before resuming driving, you should be free from the sedative effects of any painkillers you may be taking.

You should be comfortable in the driving position and able to safely control your car, including freely performing an emergency stop.

It is advisable not to restart driving for about 14 days after discharge. However, after about a week, you might want to test your fitness to drive.

Do this in a safe place without putting the keys in the ignition: simply sit in the driving seat and practise putting your feet down on the pedals. If you feel pain, stop immediately.

Only when you can put enough pressure on the foot pedals to perform an emergency stop – without feeling any pain or soreness afterwards – should you think about driving again. It is advisable not to restart driving with a long journey.

Who do I contact if I have questions or concerns?

Major Trauma Nurse Coordinators:
Contact Hospital switch board on 0151 525 5980 and ask switchboard to bleep 5428.

This service is available 7 days a week from the hours of 8 am to 8 pm.

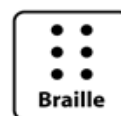
Nursing staff on Major Trauma Ward:
Telephone number: 0151 529 6255

During working hours 8am - 5pm Monday to Friday you can Contact the secretary and leave a message for the surgical team.

If you think that your condition is serious then it is best to come straight to Aintree Accident & Emergency department*.

Please seek advice from your GP.

***When you come to the hospital please bring this and any other relevant discharge documents that you may have been given at the time of discharge to help the A&E doctors to decide your management.**



If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact:

Tel No: 0151 529 2906

Email: interpretationandtranslation@aintree.nhs.uk