Patient information

Patients with an absent or poorly functioning spleen

Adults and children information leaflet

If you do not have a spleen, or have a spleen that does not work well, you have an increased risk of developing some serious infections. The risk is reduced by: immunisation, taking regular low dose antibiotics, and taking full-strength antibiotics as soon as the first sign of infection develops.

What is the spleen?

The spleen is an organ in the upper left side of the abdomen. It helps to protect against infections. As blood passes through the spleen, special cells kill bacteria (bugs) that may be present.

Your spleen may be taken out in an operation (splenectomy) for various reasons: for example, because of an illness that affects the spleen, or if it is damaged by an injury. Also, the spleen may not work well if you have some diseases: for example, sickle cell disease, thalassaemia, and lymphomas.

What is the risk without a spleen?

You have a greater chance of developing some serious infections if you do not have a spleen, or have a spleen that does not work properly. However, you can normally cope with most infections without a spleen. The spleen is just one part of the immune system (body's defence). Other parts of the immune system protect against most infections. Examples of infections that are more likely to develop if you do not have a working spleen are pneumonia, meningitis, and malaria.

What should I do if I think I may have an infection?

Infections can make you ill more quickly and be more serious in people without a correctly-functioning spleen. It is important that you consult a doctor immediately if signs of infection appear. The most common sign is fever, but a severe sore throat, an unexpected cough, severe abdominal ('tummy') pain, a headache with drowsiness, or a rash, are also reasons to consult a doctor PROMPTLY. If you have been given a reserve dose of full-strength broad-spectrum antibiotic (see below) you should take this straight away whilst seeking a doctor's advice.

What can I do to reduce the risk of infection?

1 – You should be immunised against the following:

- **Pneumococcus.** This bacterium is a common cause of serious chest infection. A booster injection is normally advised every 5 years, although, in children under 10 years and some patients with other diseases (e.g. sickle-cell anaemia) your GP may suggest more frequent booster injections.
- **Haemophilus Influenzae type B (HIB).** This bacterium can cause chest infections and meningitis. Although immunisation against HIB is now routine for all children, many adults will not have had it when they were younger. Even if you have previously been immunised against HIB a booster injection is now advised for those with an absent or poorly functioning spleen. HIB immunisation is now given as a combined injection with Group C meningococcus.
- **Group C meningococcus.** This bacterium can cause meningitis. Again, it is routine for all children to be immunised against this, but many adults will not have had it when they were younger. Even if you have previously been immunised a booster injection (combined with HIB above) is now advised.
- **Influenza** – the annual "Flu–jab" each autumn. The spleen is not needed to fight off the flu virus. However, some people with flu develop secondary chest infections caused by bacteria, which may lead to pneumonia. Therefore, it is best to prevent flu in the first place.
- **Travelling abroad?** Make sure that you have all the recommended immunisations for the countries you visit. In particular, you should be immunised against Group A meningococcus if you are visiting certain hot countries where this is a risk.
- **Children** should have all the other usual childhood immunisations.

If you are to have a planned operation (elective) to remove your spleen, then your doctor should check your immunisation status at least two weeks before surgery. In particular, the pneumoccocus immunisation is best given at least two weeks before the spleen is removed.

If you had your spleen removed in the past and are not immunised, it is not too late, get immunised as soon as possible. Also, if you have been diagnosed as having a poorly-functioning spleen, then get immunised as soon as possible.

2 – Take low dose antibiotics every day

If you take a small dose of an antibiotic each day, it will prevent some serious infections. Penicillin is the usual antibiotic prescribed. Most people do not have any side-effects from the daily low dose. If you are allergic to penicillin, a low dose of erythromycin is taken instead. There is no standard medical opinion on when to stop taking this low dose or whether to continue for life.

For adults the risks of infection falls more than 2 years after your spleen stops working correctly or you have it removed, so that regular antibiotics may not be necessary in some patients. If you have another disease that increases your risk of infection continuing antibiotics is recommended, otherwise discuss with your doctor if you wish to stop taking them. Children should continue to take regular antibiotics until at least the age of 16, and for at least 2 years after the onset of a poorly functioning spleen / splenectomy.

If you have stopped taking regular low-dose antibiotics it is advisable for you to carry a single dose of full–strength broad-spectrum antibiotics from your GP. This should be taken if you become ill with fever or have other signs of infection, then contact a doctor straight away for advice and a further supply for next time.

It is important to check the expiry date of this single dose. As a general rule, loose capsules/tablets stored in a brown bottle should last for 6 months where as those contained in the original manufacturer's blister pack may last longer. You should check this with your pharmacist when you pick up the dose and ask him or her to clearly write the expiry date on the box for you.

Most feverish illnesses that you have will be common coughs and colds due to viral infections. These are not serious, and will be cleared by your immune system. The antibiotic will, with hindsight, usually not have been necessary. However, some serious infections start with symptoms similar to a cold. They can then develop quickly if you do not have a working spleen. So, it is best to 'play safe' and take a dose of the full-strength broad-spectrum antibiotics which your doctor gave you as soon as any feverish illness starts.

Travelling Abroad?

You are more likely to 'catch' malaria and meningitis if you do not have a working spleen. It may be best not to go to any countries where these illnesses are common. Ask yourself "Do I really need to go?" If you do travel, make sure you are fully immunised. Also, obtain up-to-date information about protecting against the type of malaria in the country you are visiting. This will include taking tablets to prevent malaria, and using mosquito nets, insect repellents, etc. Take the anti-malarial tablets exactly as you have been told to for maximum protection.

Also, take a course of the broad-spectrum antibiotics with you. Contact your doctor before travelling.

Other general advice

Animal and tick bites carry a risk of infection getting into the bloodstream, so consult a doctor straight away no matter how small the bite is.

Think seriously about carrying a card or wearing a special bracelet or necklet which says that you do not have a working spleen. This would alert a doctor to take rapid action if you are seriously ill and cannot tell him or her yourself. You can buy special bracelets and necklets from *MedicAlert Foundation,* 12 Bridge Wharf, 156 Caledonian Road, London, N1 9UU Tel: 020 7833 3034 www.medicalert.co.uk

Much of the information used in this leaflet has been written for the NHS by Prodigy:
PRODIGY (2002) Preventing Infection If You Do Not Have a Working Spleen, Sowerby Centre for Health Informatics at Newcastle.
http://www.prodigy.nhs.uk/clinicalguidance/releasedguidance/webBrowser/pils/PL293.htm
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