PATIENT INFORMATION

ESBLs

What are ESBLs?

This stands for Extended Spectrum Beta-Lactamases - which is a name used for a group of bacteria ¹ that are resistant to many commonly-used antibiotics. These bacteria are usually found in the bowel, where they live quite happily without causing any problem. They are no more likely to cause infection than other bacteria found within everyone's bowel.

However, occasionally they end up in a place where they shouldn't be and then it does cause an infection, for example, a urinary tract infection. This can still be treated with antibiotics, but it does mean a different choice of antibiotics from the ones that would normally be used.

How are ESBLs spread?

It isn't quite clear why ESBLs are a problem now and where most people get them from. The most important route is likely to be through poor hand hygiene, but poorly maintained or cleaned clinical and living areas may be significant in some cases. People with urinary catheters, people with diarrhoea and those who are taking antibiotics are more likely to pick them up.

What illnesses do ESBLs cause?

The most common bacteria that cause ESBLs are *E. coli* and *Klebsiella*, (although these are quite different from the *E. coli* O157 found in food poisoning) **these** are bacteria that can live in your bowel without you being unwell or showing any signs or symptoms of infection (this is referred to as colonisation). If you have ESBLs in your bowel, you are likely to carry them for a long time and there is no 'treatment' needed for this.

These bacteria cause infection if they get into an area of the body where they are not normally found, such as the urinary tract. Urine infection is the most commonly diagnosed infection, but infection in the lungs (chest), wounds and in the blood can also occur. You will only be treated if you are showing signs of infection, for example, a high temperature with burning pain when passing urine.

How are they treated?

If antibiotic tablets / syrups can be used, this would obviously be the first choice. However, antibiotics in tablet or syrup form will not work against all ESBLs and it may then require treatment with injectable antibiotics even if you are not seriously ill. If this is the case, we would hope that a nurse could come out from the hospital and give you the antibiotic once a day in your own home.

Are ESBLs a big problem?

In Torbay and South Devon we:

- Screen patients regularly for these bacteria.
- ❖ Take steps to ensure patients get the right antibiotics wherever they are.
- Make sure all local doctors know about ESBLs.

We do all this because we know there have been problems elsewhere in Britain when this has not been done. Some of the correct antibiotics are very expensive and this is also an issue for the NHS.

What if I do have to come into hospital?

You may be nursed in a side room to reduce the risk of environmental contamination and so reduce the risk of spreading it to others. Please remind staff as soon as you come into hospital that you have had an ESBL in the past.

Will my hospital treatment be affected?

No. You will be allowed to attend other departments for investigations as normal. You will have any operation or procedure that you need, as normal. The only difference is that if you do get an infection whilst you are in hospital, the doctors are likely to choose a different antibiotic to treat you.

How can I prevent the spread of ESBL?

- Good hand hygiene, especially after using the toilet and when looking after people with urinary catheters. Hand sanitisers can be used if soap and water not available.
- Maintaining a clean home. There is no need to restrict visitors.
- Taking antibiotics only when they are really necessary.

Should I change my lifestyle?

No. You should live your life as normal. With good basic hygiene, as described above, you should put absolutely no restrictions on your family or social life, secure in the knowledge that you are not placing your friends or family at risk. There is no need to avoid young children, or sick or elderly relatives and friends. And remember, you are no more likely to get an infection than anyone else - but if you do get an infection, remind the doctor that you have had ESBLs before so that they can choose the right antibiotic for you.

These bacteria have been around for years; the only difference is that they have learnt to stand up for themselves against some antibiotics!

If you require further advice after reading this leaflet, please contact:

In hospital:

Infection Prevention & Control Team,
Torbay Hospital

☎ (01803) 655757

References:

International Infection Control Council - Best Infection Control Practices for Patients with Extended Spectrum Beta-Lactamase Enterobacteriacae - C Friedman, S Callery, A Jeanes, P Piaskowski, L Scott (representing the International Infection Control Council) and members of the Best Practices Expert Panel and Reviewer.

For further assistance or to receive this information in a different format, please contact the department which created this leaflet.