ESBL Extended-spectrum Beta Lactamase

ESBL information leaflet for patients

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What are ESBLs?
ESBLs are bugs (bacteria) that live in the bowel and that cannot be treated by commonly used antibiotics. ESBL stands for Extended Spectrum Beta Lactamases.

Can ESBLs be harmful?
For most patients, ESBLs lives harmlessly in the bowel and do not cause infection. However, sometimes ESBLs can cause infection in patients, for example when they need intensive care or while receiving chemotherapy. Antibiotics are needed to treat ESBL infection. ESBLs can cause infections, such as kidney infections, wound infections or in severe cases, blood infection. If a patient is prone to infection and the infection is caused by ESBLs, it can be more difficult to treat, because many of the commonly used antibiotics will not work against ESBLs. Doctors need to know as soon as possible if a patient is carrying ESBLs so that the most effective antibiotics can be chosen to treat the infection.

How do people get ESBLs?
Patients who have already taken lots of antibiotics are more at risk of picking up ESBLs. The reason for this is that the bugs are more exposed to antibiotics, and are therefore more likely to develop ‘resistance’ to that antibiotic, so that antibiotic no longer works. ESBLs can be carried by patients, healthcare staff or visitors, either harmlessly or if they have an ESBL infection. ESBLs can spread between patients through direct contact with each other or by touching items or surfaces that the person with ESBLs may have touched, such as bed rails, toilets or equipment. As patients in hospital are much more vulnerable to infection than patients in their own homes, special precautions are required to prevent the spread of ESBLs between patients in hospital.

What are the special precautions for patients with ESBLs?
Special precautions have been designed to prevent ESBLs spreading between patients on the ward. If you have a positive test result for ESBLs, a careful check will be done to decide if you need to be cared for in an isolation room with your own toilet or commode. If ESBLs are picked up in a wound swab or from urine taken from a urinary catheter or if you have diarrhoea, you may be cared for in an isolation room.

ESBLs do not cause diarrhoea but because they live in the bowel, they may be spread more easily if you are suffering with diarrhoea. Staff will wear gloves and aprons before coming into contact with you, to protect their hands and clothes from ESBLs. Patients, staff and visitors must pay special attention to hand hygiene. All staff must clean their hands before and after any contact with every patient, regardless of whether or not they have ESBLs. If visitors are helping out with your physical care, nursing staff will advise if extra precautions are required, such as wearing gloves and aprons.

How can I help?
If you go to the doctor, another clinic, hospital or nursing home, let them know you have had a positive ESBL result. They can then take special precautions to stop ESBLs spreading to other patients who might be more prone to getting an ESBL infection.

What happens when I’m ready to leave hospital?
You can go home as soon as your doctor says you are ready, even if you have ESBLs. Carrying ESBLs will not affect your discharge. If you are going to another hospital or nursing home, your nurse or doctor will let them know about your positive ESBL result so that they can prevent it spreading to other patients.

What happens when I go home?
There is no need to take special precautions at home. People in the community are usually fit and healthy so they are less likely than hospital patients to pick up ESBLs. Clothes, bed linen and dishes can be washed as usual. It is always very important to wash your hands carefully after using the toilet and before preparing meals or eating to stop bugs spreading to other people. Clean hands protect you and others from lots of infections, not just ESBLs.

Will I get rid of ESBLs?
Your body may clear ESBLs from the bowel as you recover, but this is not always the case, and it may remain in the bowel for some time. Taking antibiotics can encourage ESBLs to grow in the bowel again, so they should only be taken for a very good reason. Antibiotics are available to treat ESBL infection but they will not clear ESBLs from the bowel.

Please do not hesitate to ask the nursing or medical staff caring for you if you have any questions or if you require more information about ESBLs.