Endoscopic Submucosal Dissection (ESD)

Patient Information

You have been scheduled for an endoscopy procedure called Endoscopic Submucosal Dissection (ESD). This information sheet is provided to explain what ESD involves and the possible side effects.

What is ESD and why do I need it?

ESD is a procedure to remove a section of tissue, usually a growth or 'lesion', from your gut wall in one piece so that when the pathologist looks at it under a microscope, he or she is better able to confirm that it is completely removed. Being able to confirm complete removal means it is more likely that major surgery can be avoided.

ESD involves cutting around and then underneath the lesion with an electrical knife. It takes advantage of the fact that the gut wall is in three layers, and most of the time the lesion that needs to be removed is in the surface layer. This means the doctor can inject a cushion of fluid into the middle layer to separate the lesion from the deepest layer, and then cut through the middle layer to remove the lesion without damaging the deepest layer.





Gastroenterology Service

What can I expect before the ESD procedure?

You will receive a pre-assessment phone call from gastroenterology nursing staff to assess your health conditions and help plan for the procedure. They will also be able to answer questions.

If you are on blood thinning medication such as warfarin, dabigatran, rivaroxiban, clopidogrel, or ticagrelor, these will need to be stopped before the ESD to prevent excessive bleeding. Please inform our booking or nursing staff if you are taking these medications and a plan will be made to stop these safely. Aspirin should be continued.

You will receive instructions about what you should eat, how long before you should stop eating, and if you need to prepare your bowel. The instructions will depend on where the lesion is located and are the same process as before a gastroscopy or colonoscopy.

Because an ESD can take an hour or two to perform, many patients will require an anaesthetic. If this is the case then you will be required to have an anaesthetic preassessment, either in a clinic or over the phone so that the anaesthetist is fully informed and can plan for possible difficulties. You may need additional tests such as an ECG or blood tests.

If you are to have an anaesthetic then your ESD will be performed in the Operating Theatres. You will be asked to report to Surgical Admissions on Level 3 of the main hospital building, next to the atrium.

If you are not having a general anaesthetic then the ESD will be performed in the Gastroenterology Department which is accessed through Level 6 of the CSB building. [continued]

What are the risks of ESD?

ESD has the following risks, some of which may be more applicable than others to your case. Before the procedure, the doctor will talk to you about these risks and how these relate to your particular problem. You can ask any questions and will be asked to sign a consent form.

Perforation

The main risk of ESD is making a hole in the deepest layer of the gut wall. This is relatively common and is usually easily controlled by the use of special clips to close the hole. If this occurs you may be given some antibiotics to protect against infection. Rarely the hole might not be able to be completely closed, requiring surgery to fix it.

Bleeding

There is a risk of bleeding during or after the ESD procedure. If the risk is high then you will be kept in hospital overnight. Rarely, you may need a blood transfusion.

Pain

Because removing tissue creates a raw area of gut until it heals, there can be some ulcer pain after the ESD. This is usually minor and managed with simple painkillers such as paracetamol. Occasionally you may need to stay in hospital for a

Infection

When the lesion is in the rectum, you will be given antibiotics in your vein during the ESD to reduce the risk of infection in your bloodstream.

Incomplete resection

night to control the pain.

Sometimes it may not be possible to remove all the lesion, and surgery may be required at a later date.

Stricture or scarring

If the ESD is in a narrow part of your gut like the oesophagus, then scarring from the healing process after the ESD can narrow it further and cause difficulties with food passing. If this occurs, then you may need one or more further gastroscopies to open the narrowing.

What happens during the ESD?

An intravenous catheter will be inserted into a vein in your arm, and you will be taken into the procedure room. You will be told in advance if you will be having a general anaesthetic or if sedation will be administered by an anaesthetist. Otherwise, sedation will be given by nursing staff under supervision of the doctor. If you have sedation rather than an anaesthetic you will have some awareness of the procedure but will be comfortable and relaxed.

What happens after the ESD?

You will be moved to the recovery area on your bed and will wake up there. In some situations you might have a tube in your nose which is there to drain the stomach and check if there is any bleeding. If you have pain you will be given painkillers. If the plan is to keep you in hospital overnight you will be moved to a hospital ward.

In most cases you will be able to go home the same day. You will be given a report of the ESD procedure and the findings will be explained to you. You will be given a plan of how the results of the ESD will be communicated to you.

It is required that you have somebody to drive you home and keep an eye on you until the next day. You may not drive a motor vehicle until the next day.

You will be able to return to your normal activities within a day or two of your procedure. Please be aware there is a risk of bleeding for 7-10 days post procedure so you should not plan to travel overseas during this time.