

Royal Infirmary of Edinburgh
Department of General Surgery

Open Liver Resection: Patient Information Sheet and Diary

Open Liver Resection

Information Sheet and Diary for Patients

This information leaflet is designed to give you and your family/carers some information about your operation. Your surgeon will have described the reasons behind why the operation is necessary and what is involved. This leaflet will give further information about the details of your hospital stay and your recovery following your operation.

We aim to provide an Enhanced Recovery After Surgery (ERAS) service. This aims to optimise your recovery and help you through the operation in the best way possible. We have also provided a patient diary so when you are in hospital you can keep track of where you are on the recovery pathway. This will be different for everybody but can give you and us a good indication of how you are recovering after the operation.

Before the operation

You will have seen your surgeon in the outpatient clinic and discussed the procedure and the reasons for it in detail. Following this you will be seen at the pre-admission clinic where you will have your medical details recorded by our team before you come into hospital.

We encourage you to do some physical exercise in the weeks leading up to your operation. This is known as “prehabilitation” and is a way of improving your fitness for surgery and the recovery period afterwards. Doing physical exercises regularly before an operation can reduce your risk of developing certain complications after the operation. The physical activity does not need to be intensive, and regular periods of moderate exercise can be very beneficial.

We have provided an information sheet showing a range of exercises that the physiotherapists ask our patients to perform during the recovery period. It would be beneficial to start with these exercises before your operation, so you become familiar with them. This can also help to increase your activity level. They can be performed in your house and are graded to start with gentle activity, which can be increased as you become familiar with them.

If you smoke cigarettes or drink alcohol, we will advise to you to try and stop before your operation. Even stopping for four weeks before surgery has been shown to improve patients’ recovery and reduce some complications and we have provided contact details for a smoking cessation service.

Day of surgery

You will be asked to fast (stop eating) before surgery. You can drink clear fluids like water or tea without milk, up to two hours before your operation. You should not eat anything for six hours before the operation.

After the operation you will initially go to the recovery unit and we will monitor you very closely while you wake up from the anaesthetic.

You will have had several “drips and lines” placed. These are to give you fluids and medications as well as to monitor your blood pressure and vital signs. These may include:

- 1) **Intravenous (IV) drip** – this will give you normal fluids directly into your vein to keep you hydrated. You will also have a line in your neck (central line) and in your wrist (arterial line). These monitor your blood pressure very closely and can be used to give medications.
- 2) **Abdominal drain** – this is a tube that is placed at the time of the operation to help drain away fluid from the tummy. This will be removed after several days. Some patients may not need an abdominal drain.
- 3) **A urinary catheter** – this is a narrow tube that is placed into the bladder via the urethra (the small tube that allows urine to pass from the bladder to the outside). This allows us to monitor how much urine you are producing and allows you to keep your bladder empty without the need to go to the toilet.
- 4) **Pain control: Epidural** – this is a very narrow tube that is placed in your back to control your pain. This will be removed after 2-3 days. Sometimes you may have instead a button to press which delivers pain relief medication into the drip if you need more pain control (this is called Patient Controlled Analgesia or PCA)
- 5) **White stockings (TEDS)** - You will also have a pair of white stockings (TEDS) on your legs. This is to prevent a blood clot (Deep Vein Thrombosis – DVT) forming in your legs. You will also receive a blood thinning injection each evening during your hospital admission and when you go home (for 28 days after your operation).

Pain control

The specialist pain team doctors and nurses will keep a close eye on your pain after the operation and make sure your pain is well controlled. The epidural or wound catheter will come out after two or three days and your pain will need to be controlled by other methods. If you are managing to eat enough, your pain can be controlled with tablet pain relief medication. Sometimes we need to give you pain relief through a drip in your vein.

If you are in pain despite the pain relief you are being given, then it is important that you let the doctors and nurses looking after you know. Good pain control is a very important part of recovery after surgery. You need to be able to take a deep breath and to have a good cough after your operation. This is important to help reduce your chance of developing a chest infection. A chest infection can prolong your time in hospital and might need to be treated with antibiotics. Your doctors and nursing team will be encouraging you to do this and if you are too sore to take a deep breath or get out of bed, then we can alter your pain medication to make you more comfortable.

Mobilising after your operation

This is a very important part of your recovery. The more you can get out of bed and walk around, the less likely you are to develop a chest infection or a blood clot in your legs. We will be able to help you with moving throughout your stay in hospital. The amount of movement that you will be able to do will progress with time following your operation.

Immediately after the operation we will raise the head of the bed, so you are not lying flat on your back and encourage you to take deep breaths and to cough. On the first day after your surgery you will sit out in a chair for at least four hours and should walk to the chair – with help from nurses or physiotherapists if needed. From the second day after the operation we will ask you to progressively sit for longer and walk further, again with assistance if needed. We have highlighted this below in your recovery diary.

Eating and Drinking

Nutrition is another very important part of your recovery. You should view food and nutrition as another form of medication that will help you recover from the surgery.

In the evening after your operation you can have clear fluids like water or tea as soon as you wake up. If this makes you feel sick, then it may be that you need to take small sips to start with. You will have fluids going in through a drip which will keep you well hydrated until you can drink normally.

Soon after your operation you can start to eat. There are no specific restrictions, but you could start with small quantities of soft foods such as soup, jelly or ice-cream. Your nurses will help you with choosing food and you should be guided by how you feel and how hungry you are. You might feel sick or even vomit when you start eating. If this occurs, then the best thing to do is to reduce the amount of food you take and wait for things to improve. We can give anti-sickness medication to try and help with this. The amount of food you have will gradually increase over the following days until you are taking a good amount of food. The dietician team may come and see you and make sure you are taking enough calories. We may give you supplemental high calorie drinks as these can give you lots of nutrition in a small volume of fluid, which may be easier to manage than whole meals.

Additional Information

Below is the recovery diary. Please take the time to familiarise yourself with what is written and the daily goals for your post-operative recovery. It does not matter if you do not achieve these goals on the precise post-operative days as everyone recovers in a different way after an operation. It simply allows us and you to aim to get you over the operation in the best way possible.

RECOVERY DIARY

Day of Surgery

Plan: You will now be in the High Dependency Unit (ward 116).

I was able to sit up in bed:

Yes No

I was able to drink water:

Yes No

I was able to eat:

Yes No

Foods eaten:

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My pain is well controlled:

Yes No

My nausea is well controlled:

Yes No

Post-operative day 1

Plan: You will be in the high dependency unit today. You will be able to sit out of the bed, walk around the bed space and continue to eat and drink.

I was able to sit in the chair for 4 hours in total:

Yes No

I was able to walk:

Yes No

Assisted Unassisted

Distance walked: metres

I was able to drink today:

Yes No

I was able to drink: litres

I was able to eat:

Yes No

Foods eaten:

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Post-operative day 2

Plan: Your epidural/wound catheter may come out today and you will be transferred to the general surgical ward. You will aim to sit in the chair for 6 hours in total and walk approximately 20 metres. You will be encouraged to eat and drink as you are able to. We will try and take out the lines in your neck and arm as well as taking the catheter out of your bladder.

I was able to sit in the chair for 6 hours in total:

Yes No

I was able to walk approximately 20 metres:

Yes No

I was able to eat:

Yes No

Foods eaten:

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I was able to drink today:

Yes No

I was able to drink: litres

I have passed wind:

Yes No

My neck line is out:

Yes No

My wrist line is out:

Yes No

My urinary catheter is out:

Yes No

My epidural/wound/PCA catheter is out:

Yes No

My pain is well controlled:

Yes No

Post-operative day 3

Plan: You will continue to sit out of bed, walk and will continue to increase what you are eating and drinking. If your epidural/wound catheter has not come out already, it will come out today.

I sat in the chair for 6 hours in total:

Yes No

I went for two walks over 20m:

Yes No

I was able to eat today:

Yes No

Foods eaten:

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I was able to drink:

Yes No

I was able to drink: litres

I have passed wind:

Yes No

My epidural/wound catheter/PCA is out:

Yes No

My pain is well controlled:

Yes No

Post-operative day 4

Plan: To spend the day out of the bed, go for two walks around the ward and continue to eat and drink.

I sat in the chair for over 6 hours in total:

Yes No

I went for two walks over 20m:

Yes No

I was able to eat today:

Yes No

Foods eaten:

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I was able to drink today:

Yes No

I was able to drink: litres

I have passed wind:

Yes No

I feel ready to go home:

Yes No

I have an out-patient appointment:

Yes No

I have an appointment to get my clips out:

Yes No

I can administer the blood thinning injections:

Yes No

Post-operative day 5

Plan: Get dressed into normal clothes and go for a walk by yourself. Continue to eat and drink

I was able to get dressed:

Yes No

I was able to sit out of bed most of the day:

Yes No

I was able to go for a walk by myself:

Yes No

My bowels have moved:

Yes No

My pain is well controlled:

Yes No

I feel ready to go home:

Yes No

I have an out-patient appointment:

Yes No

I have an appointment to get my clips out:

Yes No

I can administer the blood thinning injections:

Yes No