Enhanced Recovery Programme – Liver surgery

General Surgery
Introduction

When you are admitted to hospital for your surgery you will be taking part in an enhanced recovery programme. This programme of care aims to help you recover quickly and safely. This leaflet should increase your understanding of the programme and how you can play an active part in your recovery.

If there is anything you are not sure about, please ask.

What is the Enhanced Recovery Programme?

The Enhanced Recovery Programme is about improving outcomes and speeding up the recovery period after your surgery, as well as reducing complications. For the programme to be successful, it is important that you actively participate in your own recovery programme and take responsibility for certain aspects of your recovery. This programme is different to traditional care and can improve your recovery considerably.

The programme particularly focuses on:

- Reducing the physical stress of the operation
- A structured approach to immediate post-operative management, including pain relief
- Early mobilisation
- Early feeding
- Setting nutritional and activity goals

Some patients will be able to benefit from all aspects of this programme, whilst others will be able to benefit from just some aspects of it. This will depend on several factors, particularly your state of health and fitness at the outset. However we will endeavour to use as much of the programme as is practicable in each individual patients’ case.
Admission preparation

It is important for you to be thinking about planning your discharge now, before you go into hospital. When you come home from hospital you still have a lot of recovering to do, and you will not be able to do everything for yourself straight away because you will tire easily. You can help yourself by arranging help and support before you come into hospital, such as:

- Make sure you know who can come and collect you from hospital and please bring their contact details with you.
- Ask friends and relatives if they can come to stay or visit to help around the house when you get home.
- Arrange for a friend or relative to do some shopping for you, make extra portions of food to freeze or purchase ready meals and convenience foods that you can freeze for use in the first couple of weeks.
- Get up to date on your housework before you come into hospital, this will help reduce the load when you get home.
- Arrange additional childcare or help with school runs where necessary.
- Arrange care for your pets, if necessary.

If you have any requirements that need to be put in place before you go home, or any concerns or queries, please talk to your clinical nurse specialist, key worker, pre-assessment nurse or doctor before you come into hospital.

What should I expect before my surgery?

Eating and Drinking

It is important that you are well nourished and not unintentionally losing weight before your operation. This will assist the healing of your wounds; reduce the risk of infection as well as improving your general recovery.
When you visited the pre-assessment clinic before your operation you will have been asked questions about your weight, appetite and dietary intake. If you have lost weight without trying to do so or your appetite has been poor, they will have given you some advice and written information. They may also have suggested they refer you to a dietician and/or advise you to commence supplement drinks three days before your surgery.

On the day before your surgery you should eat and drink as normal. In order to maximise your nutritional status we recommend you include a few extra snacks in your diet. A key aspect of your enhanced recovery programme is that you will be given carbohydrate (sugary) drink to drink the night before your surgery and a further drink up to 2 hours before your surgery. This drink is called preload.

These drinks have several benefits to your recovery. They will:

- Give you energy to help you recover
- Reduce the risk of nausea (sickness)
- Help your wounds heal
- Reduce the risk of infection
- Generally aid your recovery

**Preload – Preparation guidelines**

Step 1 – Pour 400ml of water into a cup

Step 2 – Add the contents of the sachet/s of preload into the cup and stir continuously until the powder has dissolved.

Step 3 – Drink as directed below:

**When should I take the preload?**

**Evening before surgery**

By 9pm: 2 sachets of preload in 400mls of water
Day of surgery

If your surgery is scheduled for the morning you should have nothing to eat or drink after 2am, but you may have a small amount of water and your carbohydrate drink, up to 2 hours before your operation – 1 sachet of preload in 400mls to be finished by 6am.

If your surgery is scheduled for the afternoon you should have a light breakfast before 6.30am, and then nothing except a small amount of water and your carbohydrate drink up to 2 hours before your operation – 1 sachet of preload in 400mls to be finished by 10.30am.

Admission

It is usual to be admitted the day of your surgery to the Elective Surgery Unit (ESU). You will be contacted by the ESU staff prior to your admission informing you what time to come in.

When you arrive at ESU, the necessary documentation will be completed and any nursing procedures will be carried out. You will go to theatre from ESU and after your surgery, you will be allocated a bed on one of the main wards or units. Please note that your property will remain in ESU until you have returned from theatre and placed onto a ward or unit. Therefore, it is advisable not to bring any valuables.

Preparation for surgery

In order to reduce the risk of clots forming, the majority of patients will require daily injections of Clexane which is an anti-coagulant (to thin the blood). You will also be asked to wear anti-embolism stockings on admission. They are designed to prevent deep vein thrombosis (DVT) which is a development of blood clots in the leg.

You will need to wear them for the duration of your stay and they will be removed daily for hygiene reasons. Some patients may be advised to continue wearing stockings after discharge from hospital, you will be advised by the medical staff.
What can I expect after my surgery?

ITU/HDU
For some patients they may need to go either to the Intensive Care Unit (ITU) or the High Dependancy Unit (HDU) following their operation for a day or two, these are both mixed sex units. There is a higher staff ratio on these units and we will do all we can to respect your relatives privacy and dignity at all times, but recognise this may not be sufficient for everyone. Please let a member of staff know if we can do more.

Eating and drinking
A few hours after your operation, you will start drinks and, if you wish food. It is important that you eat normally after your operation because your body needs more nourishment to help heal your wounds, reduce the risk of infection and help your recovery generally. You also need to drink at least 2 litres of fluid daily.

Mobilisation/getting out of bed
Following your surgery, when you wake up, it is important that you start deep breathing exercises. Breathe in through your nose and slowly out through your mouth. This should be done at least five times an hour and this should reduce the risk of a chest infection. It is also important to point your feet up and down and circle your ankles to reduce the risk of clots in your legs.

Once you have been back from surgery for more than six hours, if possible, the staff will help you out of bed and you will be encouraged to spend two hours sitting out of bed. On the following days you will be expected to sit out for as least eight hours and you will also be encouraged to walk about 60 metres 3-4 times a day after surgery. Being out of bed in a more upright position and by walking regularly improves lung function and there is less chance of chest infection, as more oxygen is carried around the body to the tissues.

Try and wear your day ‘comfortable’ clothes after your surgery as this can help you feel positive about your recovery.
Sickness
Sometimes after surgery a person may feel sick or be sick. This is usually caused by the anaesthetic agents or drugs we use. You will be given medication during surgery to reduce thus, but if you feel sick following surgery, please speak to your nurse who will be able to provide medication to help you. It is important to relieve sickness in order to allow you to feel better so that you can eat and drink normally which will aid your recovery.

Pain control

It is important that your pain is controlled; you will not be pain free but should be comfortable, so that you can walk about, breath deeply, eat and drink, feel relaxed and sleep well. You may have an injection in your back (epidural) which allows a continuous supply of pain relieving medicine to be given. In addition you will be given other pain relief by mouth.

The epidural is generally removed within 48 hours after your surgery. The doctors will prescribe other types of pain relieving medicines which work in different ways and you will have these regularly (three or four times a day).

Tubes and drips

During your surgery a tube (catheter) will be place in your bladder so that we can check that your kidneys are working well and producing urine. This will be removed as soon as possible, usually within 48 hours after your surgery. You will have a drip put into your neck and fluid will be given through this to ensure you get enough fluid and not become dehydrated. This should be removed once you are drinking.

Following surgery you may have a wound drain; this is a plastic tube coming from your wound site. You may also be given extra oxygen to breathe after the operation until you are up and about.
Monitoring

Many different things will be monitored during your treatment including:

- Fluid in
- Fluid out
- Food eaten
- Pain assessment
- Number of walks
- Time out of bed

Please remember to tell us everything that you eat and drink and the amount of urine you pass. You will be able to write this information on the charts yourself.

Important Discharge Information

When you leave hospital

Complications do not happen very often but it is important that you know what to look out for. During the first two weeks after surgery if you are worried about any of the following please phone the telephone numbers on this leaflet. If you cannot contact the people listed then ring your GP.

In order to reduce the risk of clots forming, the majority of patients will require daily injections of Clexane, which is an anti-coagulant, for up to 3 weeks. The expectation is that you will be taught how to inject the Clexane yourself; if you feel you will be unable to do this, please try and identify someone who can do this for you, i.e. a relative or a friend.

Pain

Following discharge from hospital, after surgery it is normal to experience some abdominal discomfort from the wound. This will gradually improve over several weeks. You should continue taking the pain relieving drugs, which have been prescribed for you at the hospital, until you feel comfortable. If You need further supplies or your pain is not adequately controlled you should see your GP.
Your wound

It is not unusual for your wound to be slightly red and uncomfortable during the first 1-2 weeks. Please let us know if your wound is:

- Becoming inflamed, painful or swollen
- Starting to discharge fluid

When can I return to normal activities?

For the first two weeks at home you should rest, relax and continue the exercises that you did in hospital. Go for a walk each day and gradually increase the amount you are doing. Regular exercise should help you to return to normal activities as soon as possible.

Six to eight weeks after your operation you should be back to your normal level of activity. Do not undertake any heavy lifting until six weeks following surgery and avoid standing for long periods of time. Common sense will guide your exercise and rehabilitation.

If your wound is uncomfortable, go easy with your exercise. Once your wound is pain free, you can undertake most activities.

Work

You should be able to return to work four to six weeks after your surgery depending on the type of job you do. A member of your health care team or your GP will be able to advise you.

Driving

You should not drive until you are confident that you can drive safely. A good indicator for this is when you have got back to most of your normal activities. Usually this will be within two to four weeks of surgery. It is important that any pain has resolved sufficiently to enable you to perform an emergency stop and turn the wheel quickly.
Hobbies/Activities

In general, you can take up your hobbies as soon as possible after your surgery. This will benefit your convalescence.

However, do not do anything that causes significant pain or involves heavy lifting, in which case avoid them for the first six weeks after your surgery.

Key reference sources

Clinical trial – Enhanced recovery for Liver Surgery completed April 2012 at the Royal Surrey County Hospital.

Important telephone numbers

Frensham Ward: 01483 571122 ext 4090

Pre-assessment: 01483 571122 ext 4268

HPB Specialist Nurse: 01483 402779
Notes & questions:

You may think of further questions to ask about your treatment and it is a good idea to jot these down as you think of them – you could use this space below. This will help you when you next visit the hospital or your GP.
Royal Surrey County Hospital (RSCH) NHS Foundation Trust fully subscribes to the National Patient Safety Agency (NPSA) *Being Open* best practice framework, November 2010.

**PALS and Advocacy contact details**

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located in far left corner as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

**Telephone:** 01483 402757  
**Email:** rsc-tr.pals@nhs.net  
**Opening hours:** 9.00am–4.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

Review date: July 2017  
Author: Laura Spring  
PIN140729–042

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