GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Abertawe Bro Morgannwg University Health Board

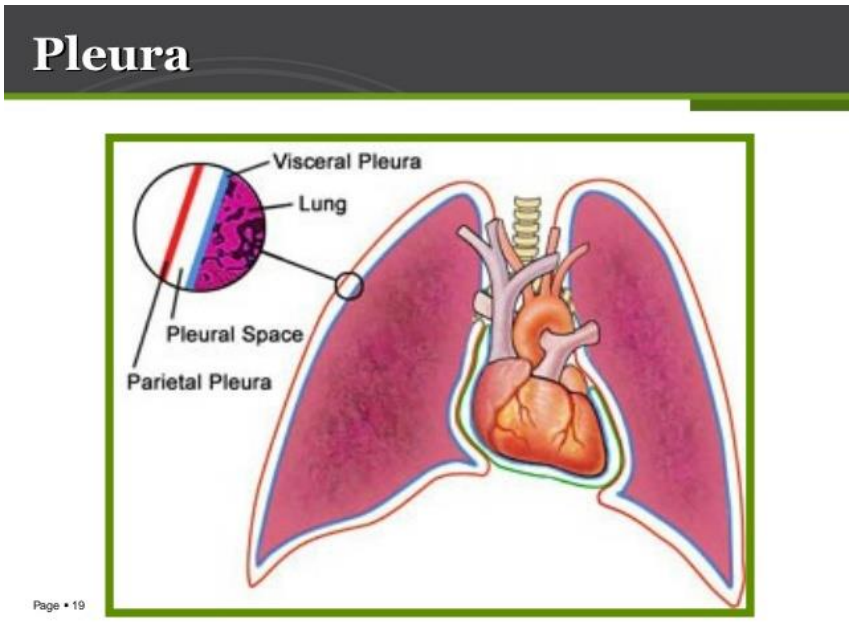
Morriston Hospital

Pleural Biopsy using Video-Assisted Thoracoscopy Surgery (VATS)

Patient Information

Introduction

This booklet describes the surgical treatment required for a pleural biopsy using video-assisted thoracoscopy surgery (VATS). The pleura is a thin lining on the inside of your chest wall. Often your respiratory doctor will refer you to a thoracic surgeon to carry out a surgical biopsy if it has not been possible to perform one under local anesthetic.



Video-assisted thoracoscopic surgery (VATS)

The operation is carried out by keyhole surgery using one to three small holes in the side of your chest towards your back. These holes allow the surgeon to pass a small camera and the instruments required for the operation. An enlarged view of your chest and lung will appear on the screen. Occasionally your surgeon will need to enlarge one of the incisions to gain a clearer view or to gain better access to your pleura.

The procedure

The procedure involves using small instruments and a camera via the keyhole incisions. This allows the surgeon to target directly the area of the pleura that requires biopsies. Several biopsies will be taken from different areas of your pleura to ensure adequate sampling. The biopsies will then be sent to the lab for analysis. If there is any fluid in your chest cavity, this will be drained and sent to the lab. All samples will be tested for malignancies and infections. Biopsy and fluid results normally take between two and four weeks to come back.

Pleurodesis

After the biopsies you may require pleurodesis. There are different types of pleurodesis your surgeon could perform. The most common is a talc pleurodesis in which a fine sterile powder is puffed onto the surface of the lung causing an inflammatory reaction that causes the lung to stick to the chest wall. If your surgeon can see signs of infection of your pleura, you will not have a pleurodesis.

Preparation for surgery

- Continue taking your medications as normal unless advised otherwise by your surgeon.
- Keep active. Being as physically fit as possible will enhance your recovery.
- You will be admitted to the Cyril Evans Ward the day before your surgery where you will be seen by the medical team. You will have blood tests and often a chest X-ray. You will be told when to stop drinking fluids and eating food. The evening before, and the morning of, your surgery you will be required to use a pink chlorhexidine wash to help reduce the levels of bacteria on your skin. You will need to wash your hair with this the night before, but not in the morning.
- Anti-embolic stockings are usually given to all of our patients. These stockings help to prevent blood clots or deep vein thrombosis (DVTs). You will be given a blood-thinner injection in your abdomen the night before surgery.

After your operation

You will spend a minimum of two hours in the Recovery Unit where we ensure you are fully awake after your anesthetic and help control any pain you may have. You will be connected to several drips and tubes which will remain in place for a few days. Once the recovery nurse is happy that you are fully awake and your pain is controlled you will return to the Cardiac High Dependency Unit (CHDU). Most patients are discharged to the Cyril Evans Ward on day two or three and go home within one week. Some patients will require a shorter or longer stay.

You may be connected to one or more of the following:

Intravenous infusion lines (drips)

These are small plastic tubes allowing for the administration of fluids or medications straight into your vein.

Chest drain

This allows air, fluid or blood that may have collected in your chest, due to your operation, to be removed. This drain will be connected to a drainage bottle and often suction. Suction is provided via tubing which is attached to the wall behind your bed. You may require two to three days of continuous suction. Your surgeon will advise you and your nursing team if you are able to mobilize without suction. You should breathe deeply and cough regularly to promote full lung expansion and drainage of any fluid. If you cannot breathe deeply or cough due to pain you should ask your nurse for pain-relief. The drain will be removed as soon as it is no longer needed. This is usually three to five days after your surgery. Some people require the drain for longer and some patients go home with a drain. If you go home with your drain, you will be monitored closely with regular clinic appointments until your drain is ready to be removed.

Urinary catheter

This is a tube passed through the urethra into the bladder allowing urine to drain freely into a drainage bag. The catheter will be removed once you are mobile and passing good volumes of urine.

Patient controlled analgesia (PCA)

This is a pump containing pain-relief medication controlled by the press of a button. The button must only be pressed by you, although your nurse may remind you that it is there. Once the button is pressed, the pump will give you a dose of intravenous pain-relief. The pump will lock out for two to five minutes, giving the medication time to work before allowing you to press it again.

Epidural

Occasionally the anesthetist will insert a thoracic epidural catheter to assist with pain management. This type of epidural will not numb your arms or legs and you will be able to mobilise fully with assistance. The pump will continuously infuse pain-relief and you will have a button to press for an additional dose. The button must only be pressed by you, although your nurse may remind you that it is there. The pump will lock out for two to five minutes giving the medication time to work before allowing you to press it again.

Enhanced recovery after surgery

You will be sitting out of bed on the day of your surgery or the morning after. This is essential to help you recover.

The physiotherapists will assist you with coughing, breathing and mobilisation every day during your stay on the CHDU.

Eating a high-protein diet together with plenty of fluids after the operation is very important to help wound healing and recovery. Your friends and family are welcome to bring you snacks or food that can be kept in the fridge, although we cannot reheat meals. There is a patient fridge available.

We recognise that the pain-relief we give you can cause constipation and therefore we give all of our patients' laxatives. These laxatives are mild and often take two or three days to work.

When you go home

Unless you are on anticoagulation medications you will require a blood-thinning injection to help prevent DVTs. The injection is a small needle that is administered into your abdomen. The nursing staff will teach you to administer the blood-thinning injection yourself. If you are unhappy or unable to do so, we can arrange for your district nurse or practice nurse in the community to do this for you. You will also be provided with a special container to dispose of your needles. This box then needs to be returned to either your GP or the hospital for correct disposal. Do not dispose of this box in your normal household waste.

As well as your regular medications, you will be provided with pain-relief. The pharmacist will explain how and when you should take this. We strongly recommend you take your pain-relief as advised to prevent your pain becoming problematic.

You will have a follow-up appointment with your consultant's registrar approximately four weeks after you go home. Should you have any concerns before then you are advised to contact your GP or thoracic nurse specialist.

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Monday- Friday 8:00am -4:00pm

Editorial Board: 997
Publication Date: September 2018
Version: 1
Review Date: September 2020
Author: Thoracic Clinical Nurse Specialist