

Debulking / cytoreductive surgery for ovarian cancer



What is this?

'Debulking' or 'cytoreductive' surgery is the medical term used to describe surgery for treating advanced ovarian cancer (or suspected ovarian cancer). Most women who have ovarian cancer are diagnosed once the original tumour has already spread to different parts of the abdomen (tummy). The aim of surgery is to locate, remove or reduce the size of cancerous tumours within the abdomen in order to improve survival and prognosis. It normally happens at the same time as removing all of the reproductive organs, such as ovaries, fallopian tubes, uterus (womb) and cervix. The surgery is performed through an open incision on the abdomen – keyhole surgery is not possible. Other procedures may be necessary to clear the cancer, such as bowel surgery with or without stoma formation, removal of the spleen, removal of enlarged lymph-nodes and removal of the peritoneum (the lining of the abdominal cavity). Debulking surgery is performed by a gynaecologist specialising in gynaecological oncology (cancer surgery).

Women with advanced ovarian cancer will receive chemotherapy as well as surgery. Some will have surgery first (primary debulking) and then receive chemotherapy around six weeks afterwards. Some will have chemotherapy first, followed by surgery (interval debulking) and then have more chemotherapy afterwards.

Before surgery

Consent

You will be asked to sign a consent form when seeing your gynaecologist in clinic. This will involve a detailed discussion on the surgery planned and the risks and benefits of surgery (see more information below 'Which procedures might be performed?'). It is difficult to know the exact operation that will be required as often the extent of disease is not known until the surgeon looks inside at the time of surgery. If there are certain procedures that you would not accept it is important to talk through them with your surgeon prior to signing the consent form. You will have the opportunity to go through the consent form with them again on the day of surgery and ask any last minute questions.

Pre-op Assessment

You will either need to attend the hospital pre-admission clinic or have a telephone appointment to discuss pre-admission information. The nursing staff in this clinic will ask you about your general health and any current medications. It is important that you bring your current medication with you. It may be that some of your regular medications cannot be taken on the day of surgery or that some medications need to be stopped for a short period of time before your operation. This will be discussed with you at this appointment. You will have some routine investigations such as: blood tests (if over the telephone you will be advised to visit your GP), a tracing of your heart (ECG) and blood pressure measurement. These investigations are to ensure that you are in optimum health for the planned operation.

Eating and drinking

It is important that you try to continue to eat a normal, healthy, well balanced diet prior to your surgery. You may have found that your appetite is reduced or you feel full quickly because of the disease inside your tummy. Try and eat high calorie foods little and often. The doctors will be able to prescribe you high-calorie drinks, which may be easier for you to digest than eating big meals.

Bowel preparation

You will be asked by the surgical team to take a strong laxative the day before surgery to prepare your bowels for the operation. The laxative will cause you to have diarrhoea, so it is advised that you stay at home and drink plenty of water to avoid becoming dehydrated.

You can eat and drink as normal until you start the bowel preparation. Once you have taken the laxatives you should only drink clear fluids. You will also be given carbohydrate drinks (Nutricia preOp) to prevent dehydration and to provide nutrients prior to surgery. Drink four bottles slowly the evening before your surgery and two bottles when you wake up in the morning.

Medications

Follow the advice from the pre-op clinic as to what medications you can still take before surgery. It is important to bring your medications or a list of your medications with you when you're admitted for surgery, so the doctors looking after you know what you take.

Length of hospital stay and preparing for home

You will likely be in hospital for around 3-7 days depending on the exact operation and how you recover afterwards.

Before you are admitted, plan how you will manage when you go home following your surgery. Consider:

- who will collect you when you're ready to go home?
- who can help you at home, such as helping you with food shopping?
- can you cook or buy some meals that you can put in your freezer so you don't have to cook?

Day of admission

You will be admitted to the hospital on the day of your planned operation, or possibly the night before. You will be seen by the gynaecology cancer team at around 8 am. You will also be seen by the anaesthetist who will discuss what to expect from the general anaesthetic and pain relief options (see below 'Will I have any pain or discomfort?'). You may need some more blood tests, provide a urine specimen and then you will be prepared for theatre.

What happens during surgery?

You will have a general anaesthetic (be put to sleep) for the surgery. A vertical cut will be made on the abdomen which begins from just above the pubic bone and may extend to just below the chest bone.

Which procedures might be performed?

Your consultant will explain what is likely to happen during the operation, depending on your scan pictures and your individual case. In ovarian cancer surgery it is difficult to know exactly what is needed until the time of the operation as small areas of disease cannot easily be seen on scans.

The aim of ovarian cancer surgery is to remove as much disease as possible to improve prognosis and survival.

- **Total abdominal hysterectomy** – surgery to remove the womb and cervix. The top of the vagina (where the cervix sits) will be stitched together to create what is known as a 'vaginal vault.' The length of the vagina will remain the same.
- **Salpingo-oophrectomy** – surgery to remove the fallopian tubes and ovaries. Most women having ovarian cancer surgery will have both ovaries and fallopian tubes removed. If you have not yet gone through the menopause you may develop menopausal symptoms, which may start around two weeks after the surgery. The doctors may be able to prescribe Hormone Replacement Therapy (HRT) if you need it, depending on the final results.
- **Omentectomy** – surgery to remove part or all of the omentum. This is a fold of fatty tissue which lies within the abdomen. It is removed because ovarian cancer likes to spread to this area. It has no function.
- **Lymphadenectomy (lymph node removal)** – surgical removal of all or some of the lymph nodes in the pelvis and around the major vessels in the abdomen. If your lymph-nodes are enlarged they will be removed to help clear the cancer. Sometimes normal looking lymph-nodes are removed in order to see whether the cancer has spread to them. The lymph-nodes are small glands within your body which help fight infection and filter lymph fluid. The lymph-nodes are connected by a network of very tiny tubes (the lymphatic system) which carries lymph-fluid around the body. If lots of lymph nodes are removed the lymph fluid can leak out of the lymphatic system into the abdominal cavity – this may cause the tummy to swell. Occasionally this will need to be drained after the surgery by placing a plastic tube into the abdominal cavity. If lots of lymph nodes from the pelvis are removed there is a risk of developing lymphoedema (swelling of the legs). To try to prevent this from happening it is important to avoid any cuts, scratches or insect bites to your legs and moisturise your skin daily. If your skin looks red and inflamed see your GP urgently as you may need antibiotics. If you do develop lymphoedema it is important that you contact your specialist nurses so that they can make a referral to a specialist team for you.

- **Peritoneal stripping** – removal of the lining of the abdominal cavity. Ovarian cancer tends to spread to the lining of the abdominal cavity. This can be stripped away and grows back over several months.
- **Diaphragm stripping** – peritoneal stripping from the diaphragm muscle. The diaphragm is the muscle layer which separates the thorax (lung cavity) from the abdomen. Ovarian cancer often spreads to this area. Following this procedure there is a risk of fluid collecting around the lungs (pleural effusion). This may make you feel short of breath or your oxygen levels may drop. If this occurs a plastic tube (drain) may need to be inserted into the chest to remove the fluid. The liver is next to the right diaphragm and can often become 'bruised' during the process of diaphragm stripping. You will have regular liver function blood tests after the surgery to ensure that the bruising recovers.

Bowel (intestine) surgery

- **Resection of the large bowel (colon)** – this is when a piece of the large bowel (colon) is removed due to cancer spread or if the cancer is causing a blockage of the bowel. In some cases, the two ends of the bowel can be sewn back together, creating an anastomosis (join). In other cases, one of the ends of the bowel needs to be placed in an opening (known as a stoma) outside of your abdomen. This is called a colostomy (bag), and is where your stool will be passed through.
- **Resection of small bowel** – this is when a piece of small bowel is removed due to cancer spread. If the two leftover ends can't be joined together, one end of the bowel will be passed through an opening in your abdomen (stoma). This is called an ileostomy, and is where your stool will be passed through.

A stoma may be created if it is not possible to join the bowel back together again, or if there is a high risk that the join could leak (anastomotic leak). A leak causes stool to leak into the tummy, which can make you very poorly from infection. In some cases, the stoma will be temporary and can be reversed through a second operation, for other people it will be permanent.

Specialist stoma care nurses will teach you how to care for the stoma and will also visit you at home. We won't let you go home until we know you can look after your stoma by yourself.

- **Appendicectomy** – surgical removal of the appendix. The appendix may need to be removed because of cancer spread or because sometimes tumours within the appendix can spread to the ovary and cause cysts and tumours. It may be removed by itself or as part of a large bowel resection. The appendix has no function.
- **Splenectomy** – surgical removal of the spleen. The spleen is an organ in top left part of your abdomen which filters blood and is involved in the immune system to help fight infections. Ovarian cancer can spread to the spleen and it may need to be removed. After having a splenectomy it is important to have yearly vaccinations and take daily low dose antibiotics to help prevent serious infections. Before you are discharged home the doctors will advise you on what is needed.

Following surgery

Where will I be looked after?

Following your operation, you will be transferred to the Enhanced Perioperative Card Ward (EPOC) or to the gynaecological ward (Eden ward) for your recovery and ongoing care. If you are more at risk of complications, you may need to go to the high dependency unit (HDU) for a short while. This is a specialist ward where you can be monitored more closely.

Will I have any pain or discomfort?

We aim to keep you as comfortable as possible. There are various methods that we use – these will be discussed with you when you meet the anaesthetist on the day of surgery.

- **PCA (patient controlled analgesia) pump** – this is a syringe which contains strong pain relief that you administer yourself by pressing a button. You should press the button when you feel pain. There is a safety 'lock-out' mechanism so that you will not overdose on the medication and you can push the button as much as you want. You will also be able to ask for additional pain relief if this is not as effective as you need.
- **Spinal anaesthetic** – this is a process of injecting pain relief to the nerves as they come out of the spinal cord. This is a single injection into your back before the operation. It provides excellent pain relief for the first six hours after the operation and slowly wears off afterwards.

- **Epidural anaesthetic** – this is similar to a spinal anaesthetic, but instead of a single injection a very thin plastic tube is inserted into your back, meaning further pain relief can be given for up to three days after the surgery. It is normally inserted when you are awake prior to the surgery.
- **Oral medication** – this is tablets or liquids that can be given at regular intervals to help with pain relief.

If you are in pain please tell the ward staff. There will also be extra medications that can be given to you as and when you need them. It is important that your pain is controlled so that you can be on your feet early, eat and drink, feel more relaxed, are able to sleep and more inclined to do your post-op exercises. This will all help with your recovery.

Will I need a catheter?

When you wake up from the operation you will have a urinary catheter (tube into your bladder) so that you do not need to get up to the toilet for the first night. It will also enable us to accurately monitor your urine output. This is usually removed on day one or two after the surgery.

After the catheter is removed you may be asked to pass urine into a measuring jug so nurses can see how much you've passed. They may also do a bedside scan of your bladder with an ultrasound to see how much urine your bladder contains. If you are struggling to pass urine, another catheter can be inserted by the nurses – this may stay in for seven days and can be removed in the outpatient clinic. This is not uncommon, and you will be shown how to care for the catheter at home by the nurses. If there has been a bladder injury or part of the bladder has been purposefully removed during the surgery, you may need the catheter to stay in for a few weeks. Again, you will be shown how to care for this at home.

Will I have any drips or drains?

You may have some intravenous fluid (bag of fluid going into a vein) attached – once you have started to eat, drink and pass urine adequately these will be stopped.

You may have a drain inserted into your abdominal cavity at the end of the operation. This is to allow any excess fluid to be drained and will be monitored closely. Once drainage has become minimal this will be removed.

What about my bowels?

It may take 3-5 days before your bowels open and you may experience some 'wind' pains in your tummy.

To help get your bowels moving again it is important to drink plenty, mobilise gently (walk around the ward) and begin to eat a balanced diet, as advised by the team. You may find that peppermint drinks or mints help with wind discomfort. The doctors can prescribe laxatives for you if necessary.

Sometimes, bowels are particularly sluggish and slow after surgery and food does not move through them efficiently. This is called an ileus and can cause you to feel sick and vomit. If you develop signs of ileus, you will be advised to have a nasogastric (NG) tube inserted by the nurses (tube that goes into your nose through to your tummy.) This will allow extra stomach contents to painlessly drain out and help avoid you feeling sick or vomiting. The NG tube may stay in for a few days.

When will I be able to get out of bed?

Following your operation, we want you to regain your independence as soon as possible. It is important that we get you out of bed and begin to mobilise you to help prevent complications such as blood clots, chest infections, pressure sores and loss of confidence. On the first day after the operation the nurses will help mobilise you into the chair. Every day of your recovery you should aim to spend more and more time out of bed. It will become slightly easier every day!

How can I help prevent complications?

It is not always possible that you will be seen by a physiotherapist while you are in hospital so here are a few exercises that you can begin to do once you wake from your operation:

- **Legs** – point your feet up and down and circle your ankles to help prevent any clots in your legs. Repeat this hourly until you are mobile.

- **Breathing** – relax your shoulders, take a normal breath in, allow your abdomen to move outwards, then relax and breath out.
- **Deep breathing exercises** – these are very important to help prevent a chest infection, which would prolong your stay in hospital. Support your abdomen with a towel if necessary, bring knees up slightly and relax your shoulders, then breathe in through your nose and out through your mouth slowly (as if you are blowing up a balloon). Repeat this between 3-5 times every hour.
- **Huff** – take a normal breath in and imagine you are misting a mirror in front of you, open your mouth and forcefully exhale. Repeat this and try to do hourly.

How do I reduce my risk of clots?

- Mobilise gently as much as you can tolerate.
- Wear anti-embolic stockings from the ward for four weeks afterwards.
- Have blood thinning injections into your tummy for four weeks after surgery. A nurse on the ward will teach you how to do this. If you do not wish to do these injections yourself we can arrange for the district nurses to visit you at home.

How do I care for my wound?

Your wound may be closed with clips or a dissolvable stitch. You may have a dressing applied over the wound or surgical glue.

If you have clips these need to be removed 10-12 days following your operation. If you are able to get to your GP surgery, the practice nurse can remove these for you. If you are unable to attend your GP surgery the ward staff can arrange the district nurses to remove them for you at home. The ward staff will give you a staple remover on discharge to give to the nurse who removes them.

If you have a dissolvable stitch these will dissolve on their own.

When at home aim to wash your wound in the shower every day. Allow the wound to get wet and using clean hands or a sponge gently clean the skin as

you would normally. Repeat dressings are normally not required. Avoid touching your wound except when you are washing and if you have glue applied try and resist the urge to pick at it!

What should I look out for?

Your wound may appear red for a couple of weeks following your surgery and it may also be tender – this is normal. However, if the wound:

- becomes hot, inflamed, painful or swollen
- begins to discharge fluid or pus
- begins to open

Please call your GP, Gynaecological Ward or Clinical Nurse Specialist for advice.

What should I expect when I am discharged?

Before you are discharged home you should be walking gently around the ward area and will be eating and drinking and passing urine. Your pain will be under control with oral medication and you will be sent home with these. Once home you should be able to undertake your own personal care but you may need someone to go shopping for you, to do the washing and to clean the house for a few weeks.

When can I resume normal activities?

Exercise – once you are at home it is important that you have some gentle exercise on a daily basis and that you gradually increase this until you return to normal. We would hope that this will only take about 4-6 weeks.

Work – most people return to work about 4-6 weeks following their surgery. If you have a job that requires heavy lifting you may need longer. Your GP will be able to issue you with a sickness certificate.

Driving – you are advised to speak to your car insurance company before you begin driving again. You must feel comfortable to be able to drive and be able to do the emergency stop if required.

Emotions and sex – we recognise that having surgery can be a very emotional time for both you and your family. If you need to talk about how you feel both the medical team and the nurse specialists are available to discuss any concerns you may have.

Following your operation, avoid having sexual intercourse for about six weeks to allow the top of the vagina to fully heal. If you have any concerns please discuss this with your nurse specialist.

What if I have any problems?

It is not expected that there will be problems once you go home. However, if you do experience any, especially in the first two weeks following your operation, we advise you to telephone your GP or Eden ward. The clinical nurse specialists are also available Monday to Friday for advice.

What follow up will I need?

You will have a follow up consultation after your surgery. This may be over the telephone or in the outpatient department. Your gynaecologist will discuss with you the final histology results (laboratory testing) of the samples taken from your surgery and whether you need any further treatment such as chemotherapy.

Your case will be discussed at the Multidisciplinary Team Meeting. This is a meeting which includes gynaecologists, oncologists (doctors who give chemotherapy and radiotherapy), pathologists (doctors who look at your specimens under the microscope), radiologists (doctors who report your scans) and clinical nurse specialists. Any further treatment will be planned in this meeting and you will be referred for further treatment as needed. We will discuss all of this with you.

Depending on the histology results, you may be advised to have chemotherapy 6-8 weeks after your surgery. The benefits, risks and side effects of the proposed treatment will be fully discussed with you when you meet the oncologists.

If you have been diagnosed with a cancer you will need regular follow-up for a five year period.

Contact us

GP out of hours – contact your surgery

Gynaecological Ward – 01872 253163

Clinical Nurse Specialist - 01872 252037 (Mon-Fri only)

Further information

Further information and support is available from:

www.macmillan.org.uk

Local Support – www.falcancersupport.org.uk

Groups run by CNS's – Cornwall Gynae Cancer Support Group held alternate months. Please ask Clinical Nurse Specialist.

Facebook Group – www.facebook.com/groups/61326018745939

Royal Cornwall Hospital NHS Trust, Truro, TR1 3LJ

Telephone: 01872 250000

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