What is cytoreductive surgery?

Cytoreductive or Debulking surgery is the medical term used to describe surgery for treating ovarian cancer or suspected ovarian cancer, advanced endometrial (womb) cancer, or other cancer that has spread.

Most women requiring this surgery are diagnosed once the original tumour has already spread to different parts of the abdomen. The aim of surgery is to locate, remove or reduce the size of cancerous tumours within the abdomen in order to improve survival. It often happens at the same time as removing all of the reproductive organs, such as ovaries, fallopian tubes, uterus (womb) and cervix.

The surgery is usually performed through an open incision on the abdomen (midline cut) but sometimes a keyhole (laparoscopic) approach is possible. Other operations may be necessary to clear the cancer, such as bowel surgery which might require a stoma bag, removal of tumour & associated organs (including but not limited to womb, cervix, ovaries, fallopian tubes, appendix, omentum/ fat, serosa, spleen, liver capsule, parts of the stomach) and removal of the peritoneum.

Cytoreductive surgery is usually performed by a surgical oncologist specialising in gynaecological oncology (cancer surgery). The majority of women will receive chemotherapy as well as surgery.

Some will have surgery first (primary cytoreductive surgery) and then receive chemotherapy. Some will have chemotherapy first, followed by surgery (interval cytoreductive surgery) and then have more chemotherapy afterwards.

It is difficult to know what the exact operation will be required as often the extent of disease is not known until the surgeon looks inside your abdomen at the beginning of your surgery. If there are certain procedures that you would not accept it is important to talk through them with your surgeon before 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 questions.
Occasionally when the surgeon looks inside your abdomen it is obvious that a successful operation cannot be performed, and in this situation they will close your abdomen without removing the tumour.

**What will happen during surgery?**

Your consultant will explain what is likely to happen during the operation, depending on your scan pictures and your individual case. 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 surgery is to remove as much disease as possible.

**Surgery may involve**

**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.’

**Salpingo-oopherectomy.** Surgery to remove the fallopian tubes and ovaries. If you have not yet gone through the menopause you may develop menopausal symptoms.

**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 these cancers like to spread to this area.

**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. The lymph-nodes are small glands within your body which help fight infection and filter lymph fluid and can also be infected with cancerous cells.

**Diaphragm stripping.** Peritoneal stripping from the diaphragm muscle or removal of part of the diaphragm. The diaphragm is the muscle layer which separates the thorax (lung cavity) from the abdomen.

**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.

**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.

**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.
**Splenectomy.** Surgical removal of the spleen. The spleen is an organ in the top left part of your abdomen which filters blood and is involved in the immune system to help fight infections. These cancers can spread to the spleen and it may need to be removed. After having a splenectomy it is important to have yearly splenectomy vaccinations and take daily low dose antibiotics to help prevent serious infections. Before you are discharged home the doctors will advise you about what is needed.

**Peritonectomy.** Surgical removal of the lining of the abdomen and pelvis as this is often a site that a tumour can spread to.

**Will I need a stoma?**

Sometimes the bowel will be operated on. The surgeon will discuss with you the risk of bowel surgery and the possible need for a stoma.

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 on your abdomen known as a stoma and is attached to a bag called a colostomy. Your stool will be collected in this bag. Sometimes the bowel is join but a temporary stoma is formed in the hope that the bowel can be rejoined at a later date. Your surgeon will discuss your thoughts surrounding this and explain the risks and benefits to you.

We prepare all patients having this surgery for the potential to need bowel surgery. The nurse in the pre op assessment clinic will give you some powdered sachets called Picolax to take home with you. These are to help clear out the bowel ahead of surgery. The nurse will give you instructions on how to take them.

We will also refer you to the stoma nurses who will counsel you about stomas. The stoma team will either see you in the pre op assessment clinic or telephone you and send information in the post. They will also assess you in clinic or on the day of surgery and put a mark on your abdomen allowing the surgeon to see the best place for a stoma formation if one is needed.

**Following surgery where will I go?**

Immediately following your operation you will go to our recovery area. You may start to wake up here. You will then be moved to a hospital ward. This may be intensive care or high dependency care depending on the extent of the operation. Do not worry, this has been planned for everyone undergoing this type of operation.

**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 in pre assessment and on the day of surgery. Your pain will be assessed by your ward
team and you must tell them if you are in pain. You will be assessed by the pain

team during your admission.

**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 so 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.

**Rectus sheath catheters.** Catheters inserted into the sheath of the Rectus
Abdominis muscle can be used to provide analgesia following abdominal surgery.
The catheters are inserted during surgery; usually two catheters are used one on
either side of the incision. Your ward nurse can then administer local anaesthetic
into these catheters.

**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.

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-
operative 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 once you can walk to the bathroom.

Sometimes having had a catheter and the anaesthetic can change the feeling in
your bladder temporarily. This may take some time to return to normal. During this
time you need to go to the toilet regularly to empty your bladder.

**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 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, walk around the ward gently and begin to eat a balanced diet, as advised by the team. You may find that mints and chewing gum help with wind discomfort, please bring these with you when you come in for your surgery. You will often be given laxatives to help.

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 may 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 until this settles.

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 you start to move around 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 and physiotherapists will help you into the chair and help you start to walk. Every day of your recovery you should aim to spend more and more time out of bed and to do more and more. It will become slightly easier every day.

How do I care for my wound?

Your wound will be closed with dissolvable or non-absorbable stitches or metal staples. You will be told if you have non dissolvable stitches or clips that need removing and what to do about them. You may have a dressing applied over the wound or surgical glue. You will be advised how to look after you wound when you leave hospital.

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 or begins to open then please call your GP or Clinical Nurse Specialist for advice.

What about losing my fertility?

At any age, having your ovaries and/or womb removed can affect the way you feel about yourself. A hysterectomy will prevent you from getting pregnant.
The loss of fertility can have a huge impact on you if you have not yet started or completed your family and you have an operation that takes that choice away. It is important that you have the opportunity to discuss this and your feelings with your clinical nurse specialist before your operation.

**Will I need Hormone Replacement Therapy (HRT)?**

The use of HRT for women with a gynaecological cancer is not straightforward. A number of different factors influence whether or not HRT is recommended. Please discuss the options available to you with your consultant or clinical nurse specialist.

**Should I continue to have cervical smears?**

Cervical smears are usually not necessary after this surgery but on occasion follow up smears are required. This will depend on the results of tests done on the tissue removed during your surgery.

**Is it normal to feel weepy after surgery?**

Yes. It is a very common reaction to the operation. If these feelings carry on when you leave the hospital, you may wish to discuss them with your clinical specialist nurse. There are also local and national support groups that you can contact. Details are given at the end of this leaflet.

**When can I go home?**

Most women stay in hospital for 5-7 days.

The majority of incisions are closed with dissolvable sutures and the ward nurses will be able to educate you on how to care for your wound post operatively.

If you need a medical certificate to cover your length of illness and the post-operative recovery period, please ask your ward team or clinical nurse specialist for this.

**Will I need to visit the hospital again after my operation?**

Yes. A follow up appointment will usually be arranged by your clinical nurse specialist 10-14 days after your surgery in the Gynaecology Outpatients Department (D3). The tissue results (histology) from your operation will usually be available to discuss with you and to help decide if any further treatment is necessary.
What to expect before and after you go home

You will follow the enhanced recovery programme whilst an inpatient. Below is what to expect once you are home.

<table>
<thead>
<tr>
<th>Days after my operation</th>
<th>How might I feel?</th>
<th>What is safe to do?</th>
<th>Fit for work?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-7 days</td>
<td>You will have some aches and pains in your tummy.</td>
<td>Get out of bed and move about.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>You will feel sore moving in and out of bed.</td>
<td>Go to the toilet.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You may have some light bleeding like a period.</td>
<td>Get yourself dressed.</td>
<td></td>
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<tr>
<td></td>
<td>You will feel tired and may feel like a sleep in the afternoon.</td>
<td>Start eating and drinking as usual.</td>
<td></td>
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<tr>
<td></td>
<td>The second or third day after surgery is often the most challenging for you and this is expected.</td>
<td>Gentle exercises when lying or sitting like moving your ankles up and down to help with circulation.</td>
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<td></td>
<td></td>
<td>Deep breathing exercises.</td>
<td></td>
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<tr>
<td>1-2 weeks</td>
<td>You will usually return home.</td>
<td>Go for short walks.</td>
<td>No</td>
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<tr>
<td></td>
<td>Your pains should be settling now which will allow you to move about more easily.</td>
<td>Wash and shower as normal.</td>
<td></td>
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<tr>
<td></td>
<td>You will still tire easily.</td>
<td>Continue with exercises that have been recommended to you.</td>
<td></td>
</tr>
<tr>
<td>Timeframe</td>
<td>Activity Details</td>
<td>Notes</td>
<td></td>
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<td>--------------------------------------------</td>
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</tr>
<tr>
<td>2-4 weeks</td>
<td>You will have less pain as you move about.</td>
<td>Slowly build up your activity levels (longer walks).</td>
<td>No</td>
</tr>
<tr>
<td>4-6 weeks</td>
<td>You should feel stronger every day.</td>
<td>Continue to build up the amount of gentle activity you do.</td>
<td>No</td>
</tr>
<tr>
<td>6-12 weeks</td>
<td>You should continue to feel stronger every day.</td>
<td>Carry out daily activities like shopping, vacuuming, ironing, light gardening, gentle exercise and driving. Check with your insurance company before you drive and make sure you can do an emergency stop without any pain.</td>
<td>Possible but not heavy work.</td>
</tr>
<tr>
<td>12 weeks onwards</td>
<td>Almost back to normal. You may still feel tired. It is ok to rest.</td>
<td>Carry out all normal daily activities.</td>
<td>Possibly but does depend on your work and whether you need further treatments. Some patients need up to 12 weeks off work.</td>
</tr>
</tbody>
</table>
There are many charitable organisations on the internet that offer help and support. The following examples are listed for information only. This does not represent a recommendation or endorsement by the RUH. If you are concerned or confused by any information on these websites please contact the CNS team.

https://eveappeal.org.uk/

https://www.macmillan.org.uk/cancer-information-and-support/ovarian-cancer

https://targetovariancancer.org.uk/

https://ovarian.org.uk/

https://www.ovacome.org.uk/

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Please contact the Patient Advice and Liaison Service (PALS) if you require this leaflet in a different format, or would like to feedback your experience of the hospital. Email ruh-tr.pals@nhs.net or telephone 01225 825656 / 826319.