Laparotomy and mini-laparotomy
Patient Information
Even if your surgeon has explained to you what your operation entails many of us do not take in everything mentioned in the clinic, so this booklet is to help you understand your condition and the reason for the intended treatment.

As we are all different, it is not possible to personalise this information, so there may be differences between your individual case and the information given here.

If you have any queries regarding the information please discuss them with the consultant or a member of his / her team (doctors or nursing staff).

What is a laparotomy?
A laparotomy is an exploratory operation. It is performed through either a ‘midline’ incision (cut) down towards your bikini line. Or through a cut across your bikini-line at the bottom of your abdomen. This is sometimes known as a mini-laparotomy.

Why do I need a laparotomy?
Although you will have discussed your own symptoms with your consultant, you might like to know that laparotomy and mini-laparotomy can be used to perform a number of procedures, some of which are illustrated in the next few pages.

Open myomectomy
Myomectomy means removal of one or more fibroids from the womb. Fibroids are lumps of muscle that grow in the wall of the womb. They are not cancerous and are no more likely to become cancerous than any other part of the womb.

They are relatively common and the chances of them developing increases with age. Fibroids can vary in size from a small pea to a large melon. No-one really knows what causes them to develop but clinical evidence suggests they are related to the female sex hormones, mainly oestrogen. They usually develop during a woman’s reproductive years, although they rarely give rise to symptoms before the age of twenty-five.

Fibroids are rarely seen before puberty and tend to shrink in size after the menopause. Large fibroids may be removed using a laparotomy incision.
Ovarian cystectomy

Ovarian cystectomy means removal of one or more cysts from the ovary. An ovarian cyst usually develops and bursts quite naturally (and painlessly) each month so that an egg can be released by the ovary. This usually happens on the left ovary one month then the right ovary the following month and so on.

It is possible that the cysts does not burst as it should, but keeps filling with fluid and causing discomfort or pain as it gets bigger. Ovarian cysts can also vary in size and a laparotomy incision may be needed for removal of larger cysts.

Adhesiolysis

Adhesiolysis means the removal or division of adhesions. Adhesions are commonly referred to as scar tissue and may occur anywhere in the pelvic or abdominal area where there has been previous damage. Such damage may be due to infection, previous abdominal surgery or because of conditions such as endometriosis.

Whether adhesions cause chronic pelvic pain is controversial, but it is evident that freeing the adhesions may relieve some women of their pain and any associated symptoms such as painful sexual intercourse (dyspareunia).

There is no guarantee that the adhesions will not reform, and if this is the case, relief may only be temporary. In many cases however, adhesiolysis is curative and women are successfully relieved of troublesome symptoms.
**Tubal surgery for infertility**

Various types of ‘tubal’ surgery may be performed using the mini-laparotomy incision.

Illustrated below is salpingostomy, performed to open a blocked fallopian tube:

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**Removal of one or both ovaries**

If you are to have both of your ovaries removed during your laparotomy (or if you have had an ovary removed in a previous operation and are now having the remaining ovary removed) your consultant will have discussed the reasons for this with you and you may need hormone replacement therapy (HRT) after your operation. Information about HRT is available from both your GP practice and the hospital.

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**Where do I get HRT from?**

If you start HRT tablets or skin applications before leaving hospital, you will be instructed how to use them and be given a supply to take home. Your GP will then take over the care of your HRT therapy and will continue to monitor your general health. Never stop taking HRT abruptly. If you have any queries or experience any problems, always contact your GP first.
**Hysterectomy**

Sometimes a laparotomy incision is required for hysterectomy due to cancerous changes of the cervix, the lining of the uterus (womb) or the ovaries. The hysterectomy may be performed leaving the tubes and ovaries intact, known as:

**Total hysterectomy with conservation of ovaries**

If you do not have your ovaries removed, they will go on producing hormones and will continue to do so until you reach your normal age for the menopause, although there is some evidence that says this may come a year or two earlier.

You will still experience a hormonal cycle and if you previously experienced pre-menstrual symptoms such as breast tenderness, pain, bloatedness and mood swings, these may continue but are likely to be less intense.

**Hysterectomy with bilateral salpingo-oophorectomy**

If there is a problem with one or both of your ovaries, it makes sense to have them removed during the laparotomy.

Also, if you have already reached the menopause and your periods have stopped naturally, it is likely your ovaries are serving no useful function. Since there is a very small risk of cancer developing in them, it is wise to have them removed.

If you are having your ovaries removed at the same time as your hysterectomy, it will have been discussed with you and you may need information about hormone replacement therapy (HRT). Information about HRT is available from both your GP practice and the hospital. Also see page seven, the section ‘Where do I get HRT from?’.
Complications and risks

We know there may be complications following various gynaecological operations or procedures, that are not particularly serious but do happen more often.

These frequently occurring risks include:

• Pain, bruising, delayed wound healing, scarring of the skin or scar tissue inside (adhesions).
• Numbness, tingling or burning sensation around the laparoscopy scars.
• Anaemia, fatigue / tiredness. Urinary frequency or loss of control.
• Wound infection, urinary tract infection or chest infection which is usually easily treated with antibiotics. Patients are encouraged to follow the recommended post-operative breathing exercises and to reduce or stop smoking if possible.

Are there any more serious risks?

It is also known more serious risks are present in certain circumstances in these operations. These risks are rare but some risks are increased if you already have underlying medical problems or if there is lots of endometriosis and/or scar tissue (from previous operations or disease) which makes the laparoscopy more difficult. The risks are also increased if you are obese or if you smoke. The more serious risks are as follows:

1) Infection. This may occur in the pelvis, bladder, incision site or in the chest. Infections are usually easily treated with antibiotics but occasionally an abscess may form which may require surgical drainage under anaesthetic. All ladies having laparotomy are given antibiotics pre-operatively to help prevent occurrence of infection.

2) Bleeding. This may occur during the operation or, rarely, afterwards and may be sufficient to require a transfusion. If you are found to have a collection of blood in the pelvis (a haematoma) it can usually be easily treated with antibiotics but occasionally it may need to be drained surgically under anaesthetic.

3) Visceral injury. This means injury to the bowel, bladder or ureters (the two tubes coming from the kidneys into the bladder). This type of injury is very rare, the risk being increased if there are very large fibroids, significant endometriosis, and/or scar tissue from previous operations or disease which make the laparotomy more difficult. If during a mini-laparotomy, there is a visceral injury, then it may need to be repaired by laparotomy. This involves the larger abdominal incision as previously described and a longer stay in hospital.

These complications would usually be detected during the operation and be dealt with immediately. In rare cases the problem may not become apparent for a few days after the laparotomy and this may require a second operation to resolve the problem.
4) **Deep vein thrombosis (DVT).** Following a laparotomy it is possible for clots of blood to form in the deep veins of the legs and pelvis. If this does occur, a deep vein thrombosis would cause pain and swelling in a leg and can be treated relatively simply with drugs. The risk of developing a DVT is minimal, as many precautions are taken to help prevent and minimise the risks such as: recommending you reduce your smoking in the weeks before your operation, the use of medication to ‘thin the blood’ and/or support stockings, the use of special equipment in the operating theatre and also recommended post-operative leg exercises.

5) **Pulmonary embolism.** In rare cases it is possible for a clot to break away and be deposited in the lungs or heart and if this occurs it is a serious situation and will need immediate treatment with drugs. The precautions against pulmonary embolism are the same as for DVT.

If you do have any concerns about the risk of complications, please discuss them with the consultant or a member of his/her team (doctors or nursing staff) and your questions will be answered as clearly and as honestly as possible.

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**What happens before I am admitted into hospital?**

You will probably have had some MRSA swabs taken at the end of your appointment with the consultant, then filled in some medical forms and had your weight, height, pulse, and blood pressure recorded. You will then be invited back to the hospital for your preadmission appointment. Some blood samples will probably be taken and, depending on your general health and age, you may also need a heart tracing (ECG - electocardiogram), a chest x-ray or a lung function test. We may want to listen to your chest or take a more detailed history of your medical problems for the anaesthetist. You will already have had your operation explained to you by your consultant so he/she is not usually involved in preadmission and there is not usually any need for an internal examination. You will have the opportunity to ask the nurse any questions you might have.

Shortly before your operation, we usually phone you to make sure your general health has not changed since you were seen by the preadmission team and you have understood the information you have been given. An appointment will be made for the telephone call. The nurse or healthcare assistant calling you will complete your hospital paperwork and also make sure the arrangement we have made for your discharge day is still right for you.

Your anaesthetist would prefer you to stop, or at least reduce, cigarette (and cannabis) smoking in the weeks before your operation, as this is known to increase the risk of anaesthetic complications, e.g. breathing difficulties, coughing, nausea and sickness and chest infection. Please avoid drinking alcohol on the evening before your operation as this may lead to dehydration.
To reduce the possibility of skin infection, we request you do not shave your bikini-line or your legs during the week before your operation but some ‘trimming back’ of excess pubic hair may be required, you can do this yourself at home or the nursing staff will help you after you are admitted.

**Admission into hospital**

Do not have anything to eat or drink as instructed in your admission letter. Do not suck sweets or chew gum. As you will be admitted on the day of your operation, you will need to take a bath or shower at home and take off as much of your jewellery as possible although we are able to cover wedding rings/bangles if you are unable to remove them. To reduce the possibility of any damage to your eyes, it is very important you remove all mascara and wear glasses instead of any type of contact lenses. Please wear comfortable clothes that are not tight around the waist.

You will need to bring a packet of sanitary towels into hospital with you, toiletries, dressing gown, nightgown and slippers, plus any medications that you are currently taking. You may also choose to bring in a book or magazine.

Please be aware that South Tees Hospitals NHS Trust cannot be held responsible for any personal belongings, valuables or money you bring in with you.

Please read your admission letter carefully to see where you are being admitted to. If you are unsure, you may phone the nursing staff using the numbers towards the end of this leaflet.

**What can I expect before the operation?**

You should normally have signed a consent form before your admission day but if you have not done this, you will be seen by your consultant or a member of his/her team who will explain your operation in detail and answer any questions you may have before you sign the consent form. You will also have the chance to speak to your anaesthetist before your operation. The nurses will give you ‘support socks’ and a small injection may be given to thin the blood, helping to reduce the risk of a blood clot developing in your legs during the operation. You will then go to the theatre area with a nurse and/or porter.

**What can I expect after the operation?**

When the operation is completed you will be woken by the anaesthetist and transferred, on your trolley, to the recovery area in theatre. Your recovery nurse will look after you and stay with you until he/she is satisfied with your condition. You will be transferred to the ward on your trolley and the ward staff, with the help of the theatre porter, will transfer you into your bed. You will probably feel drowsy for a few hours afterwards.

You may have a ‘drip’ (also known as an IV) to provide intravenous fluids until you are able to start drinking.

The anaesthetist usually gives you pain relieving drugs while you are asleep in theatre and these should result in a comfortable postoperative recovery. If necessary, we can use other methods of pain relief such as a PCA (patient controlled device) allowing you to control the amount of pain relief you receive.
If you do have a PCA, it is usually removed the day after your operation, when it is no longer required, and painkillers are then given by mouth.

You may have had a catheter inserted into the bladder. This is a very slim rubber tube which drains urine from the bladder so that: a) you do not have to get up to go to the toilet when you may still be feeling a bit drowsy and sore; b) we can make sure that the bladder is working well. The catheter is usually removed the night after your operation. Its removal is a simple and painless procedure.

You may be visited by the physiotherapist the day after your operation, who will give you advice on gentle post-operative exercise. You will be encouraged to increase your mobility gradually during the day after your operation until you can be fully mobile making it possible for you to have a shower or to go in the bath, with some assistance from the staff.

You may feel much more tired than usual after your operation as your body is using a lot of energy to heal itself. You may need to take a nap for the first few days.

It usually takes a few days before your bowels start to work normally and you may experience discomfort associated with a build-up of wind. This usually resolves itself, but if it becomes a problem the nursing staff may provide some peppermint water to drink and encourage taking gentle exercise.

You may want to bring a bottle of baby’s gripe water into hospital with you as many women feel that this is effective in relieving wind pain.

It is important to keep your genital area and any abdominal wounds clean. A daily bath or shower is advisable paying particular attention to these areas. Avoid the use of highly scented soaps, bubble bath and vaginal deodorants, etc. We will provide a separate sterile towel to dry the wound and a sterile dressing to cover the wound after bathing. If dressings are still needed on discharge they will be provided by the nursing staff. You may have dissolving stitches in your wound, in which case you will be advised by the nursing staff how to care for them. If you have clips, staples or stitches (sutures) which need to be removed, the nursing staff will explain how to care for your wound and advise you when they will be removed.

You may have some vaginal bleeding in the first few days after the operation. The bleeding normally turns into a red/brownish discharge before stopping completely and can last anything from a few days to a few weeks. If bleeding becomes heavier than a period or smells very offensive, let the doctor or nursing staff know as it may mean that you have an infection. We advise you to use sanitary towels in preference to tampons whilst the bleeding persists, as this will help you to keep a check on the amount you are losing and will help to reduce the risk of infection associated with tampon use. Some further, slight, bleeding may occur about four to six weeks after your operation. this can happen because your internal stitches are dissolving. As long as this bleeding only lasts for a day or two do not worry, but if it becomes very heavy and you are worried, please contact your GP.
How long can I expect to be in hospital afterwards?
Many patients feel well enough to leave hospital one to three days after the operation but you must tell your nurse how you are feeling and she will help you to decide whether you are ready.

What happens when I go home?
The majority of women feel quite fit and well within four to six weeks after a laparotomy but all patients are different. The actual rate of recovery depends to a large extent on your state of health before the operation, the reason for the surgery and the type of laparotomy performed. It is important you resume your normal activities gradually and limit what you do by how tired or how uncomfortable you feel.

If you are given support stockings, you are strongly advised to wear them day and night for two weeks. You may then reduce to wearing them only during the night for a further four weeks (or until you are back to your full mobility).

Continue with any exercises you were advised to do in hospital. You may find you get tired quite quickly at first, but this will improve with your general fitness level.

Returning to work is up to the individual and depends on the type of job you do. For example, a job involving heavy lifting will take a bit longer to return to, usually about 12 weeks, but if you are in a job with no lifting involved, you may be able to return after six to eight weeks.

You are the best judge of how you feel, but please remember that with both types of laparotomy - even the mini-laparotomy using the smaller abdominal incision, you have had a major operation and time is needed to allow the healing of the muscles and tissues on the inside.

You can normally resume driving when you can stamp your feet hard on the ground without causing any pain or discomfort, and when you believe that your concentration will not be impaired. Your insurance company will probably assume you are not fit to drive after a major operation until your doctor says you can. If you have any concerns about this, check with your insurance company.

You may resume sexual activity when you feel fit and able to do so, but it is advisable to give your stitches time to heal (usually about three to four weeks).

Many women find it reassuring to know their sexual response should change very little if they have had a hysterectomy during the laparotomy. The vagina is essentially unaltered unless you have had a repair operation at the same time, in which case the vagina may feel a little tighter and more firm. If an orgasm is a normal experience for you during sexual activity then this should continue. In fact, many women feel that their sex life after a hysterectomy improves, because the pain and the bleeding problems which usually warrant hysterectomy have been removed and there is no longer the risk of an unplanned pregnancy.

The Royal College of Obstetricians and Gynaecologists have published post-operative information for women that have had abdominal hysterectomy. If you do have a hysterectomy during the laparotomy operation, you may wish to read it in addition to this information, it is free to download, and is called ‘Recovering Well’.

It can be found on the following website: http://www.rcog.org.uk/information-you-after-abdominalhysterectomy
General advice
If you have had your cervix (neck of the womb) removed during your laparotomy, there is usually no need for further smear tests unless you have had abnormal smears in the past, or you are advised otherwise. If the neck of the womb remains intact, please attend for your smears as usual. If you are in doubt, please discuss this with one of the doctors or nurses or your own GP.

If you have any of the following symptoms, you should contact your GP:
- Vaginal bleeding, which is heavy and fresh, bright red or the passing of clots.
- Pain which is severe and not controlled by your prescribed painkillers.
- A smelly vaginal discharge.
- Feeling unwell, hot and feverish.
- Pain in the calf muscles or chest.

Breathing exercises
The recommended breathing exercises mentioned should help maintain a clear chest, tone up muscles and ease wind pain following surgery. Start this exercise as soon as you wake up from the anaesthetic and do regularly until you increase your walking.

Bend your knees up with feet flat on the bed, breathe in through your nose until your lungs are as full as possible, then relax as you breathe out through your mouth. Repeat five times every half hour or so, and follow with two huffs.

Huff: Position as above with hands or pillows supporting any area of discomfort. Take a medium breath in, then force the air out quickly through an open mouth, as though you are trying to mist up a large mirror. Follow this with a cough – take a big breath in first, and do not worry about this doing any damage in the area of your surgery.

Foot and knee exercises: These should help the circulation and help prevent clots from forming in your legs. Repeat every time you do your breathing exercises and until you are walking about. Bend feet up and down at the ankle firmly and quickly. Draw circles with your feet. Press back of the knees into the bed and tighten up the thigh muscles.
We hope you have found this information helpful. Please remember our staff will be happy to answer any questions you have about any aspect of your care and welcome any comments about this leaflet.

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<th>The James Cook University Hospital</th>
<th>The Friarage Hospital</th>
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<tr>
<td><strong>Appointments Desk:</strong> 01642 854861 / 282714 / 854883</td>
<td><strong>Appointments Desk:</strong> 01609 764814</td>
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<tr>
<td><strong>Gynaecology Outpatients Dept. (Including Pre-admission Service):</strong> 01642 854243</td>
<td><strong>Gynaecology Outpatients Dept:</strong> 01609 764814</td>
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<td><strong>Surgical Admissions Unit:</strong> 01642 854603</td>
<td><strong>Surgical Admissions Unit Reception:</strong> 01609 764847</td>
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<tr>
<td><strong>Women’s Health Unit / Ward 27:</strong> 01642 854527</td>
<td><strong>Nursing Staff:</strong> 01609 764657</td>
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<td><strong>From 7am Mondays until 5pm Fridays, Allen POS.D.U.:</strong> 01609 764405</td>
<td><strong>From 5pm Fridays until 7am Mondays, Allerton Ward:</strong> 01609 764404</td>
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Comments, compliments, concerns or complaints

South Tees Hospitals NHS Foundation Trust is concerned about the quality of care you receive and strives to maintain high standards of health care.

However we do appreciate that there may be an occasion where you, or your family, feel dissatisfied with the standard of service you receive. Please do not hesitate to tell us about your concerns as this helps us to learn from your experience and to improve services for future patients.

Patient Advice and Liaison Service (PALS)

This service aims to advise and support patients, families and carers and help sort out problems quickly on your behalf.

This service is available, and based, at The James Cook University Hospital but also covers the Friarage Hospital in Northallerton, our community hospitals and community health services. Please ask a member of staff for further information.

Authors: The Gynaecology Medical and Nursing Team at The James Cook University and Friarage Hospitals.

Acknowledgements: The Royal College of Obstetricians and Gynaecologists, 27 Sussex Place, London NW1 4RG

More patient information is available on their website: www.rcog.org.uk/womens-health/patient-information

The James Cook University Hospital
Marton Road, Middlesbrough, TS4 3BW. Tel: 01642 850850
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