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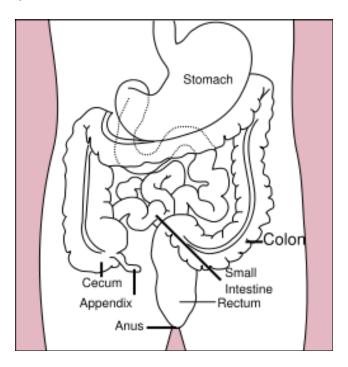
## WHAT'S IT LIKE TO HAVE YOUR

## **APPENDIX REMOVED?**

THIS INFORMATION REFLECTS THE PERSONAL PRACTICE OF A/PROF KELLEE SLATER ONLY AND DOES NOT SUBSTITUTE FOR DISCUSSION WITH YOUR SURGEON.

## WHERE IS THE APPENDIX AND WHAT DOES IT DO?

The appendix is located in the lower part of the abdomen on the right side. It is a blind ending tube about the same size as an earth worm. It is attached to the large bowel and faeces can move in and out of it. Its function remains a mystery however it is apparent that humans can cope perfectly normally after the appendix is removed. The appendix can become inflamed in people of all ages and removal of the appendix is one of the commonest operations performed.



## WHY DO PEOPLE GET APPENDICITIS?

This is also a bit of a mystery. The most common cause seems to be when a ball of faeces gets stuck in the appendix and causes pressure on its wall. This probably slows down the blood flow in the appendix. Swelling occurs, further cutting off the blood supply to the appendix and eventually infection and gangrene set in and the appendix ruptures.

Other things like worms, tumours and infections can cause appendicitis. The appendix is a very common site for a tumour called a carcinoid and the pathologist will look for this under the microscope. A carcinoid may need further treatment with a more extensive operation. Rarely, a cancer of the large bowel may be a cause of appendicitis.

## **HOW IS APPENDICITIS DIAGNOSED?**

Most cases can be diagnosed just by the story of the pain and examination of your abdomen. A blood test that indicates infection is present is also helpful.

There are other things that can cause pain on the right side of the abdomen apart from appendicitis. This can include a urine infection, problems with the ovary and tube, pregnancy in the fallopian tube, bowel infections and swelling of the glands around the

appendix. If the story is a little atypical some further tests may be required to make sure the diagnosis is correct. A urine test is usually sent off to check for a urine infection. For women, a pregnancy test is usually done.

Ultrasound is very good at looking at the ovaries and tubes in women and will help to rule out problems with those organs. Ultrasound does not always see an inflamed appendix. CT scan is another excellent test for appendicitis and will diagnose most cases.

#### WHAT IS THE TREATMENT OF APPENDICITIS?

Most people with the diagnosis of appendicitis will need an operation to remove their appendix. The operation is usually done within 24 hours of presentation to the hospital. The vast majority of patients with appendicitis are treated this way.

In most cases, the inflammation will be progressive and the appendix will go on to form a collection of pus around it (an abscess) or the appendix will die and perforate. Both of these problems are serious.

When a patient presents with many days of pain i.e. a week after getting appendicitis, they might have formed an abscess. This can make surgery very difficult. In selected cases, the best option may be not to operate straight away, but to give a long course of antibiotics via a drip. If there is an abscess, another option may be to drain the pus in the x-ray department with a small tube inserted through the skin. This will take the heat out of the situation and make things get better. When all the inflammation settles, the appendix can then be removed via a booked operation about six weeks later. This can often be done with keyhole surgery.

Occasionally, appendicitis can be quite mild and there are some cases that might get better without an operation, especially if antibiotics are given. Some patients can have a few episodes of appendicitis before the diagnosis is made. If pain continues to occur, the appendix can then be removed in an arranged fashion. This is called interval appendicectomy.

## WHAT DOES THE OPERATION INVOLVE?

Most commonly, the appendix is removed via keyhole (laparoscopic) surgery. This is done by making three or more small cuts in the lower abdomen. Carbon dioxide is pumped into the tummy to inflate it and provides a space to operate in. A camera mounted telescope and long instruments are inserted and the appendix is cut free of its attachments. A tie is placed around the base of the appendix and it is removed. The operation takes anywhere from 10 minutes to an hour depending on how inflamed the appendix is.

Sometimes, the appendix cannot be removed safely by keyhole surgery and I will make an incision directly over the appendix on the right side of the abdomen. This is called "open surgery". This is a time honored operation. Common reasons to do this incision are: burst appendix, bleeding that is difficult to control with keyhole surgery or if the appendix is in a difficult position and cannot be reached safely with the long instruments. Converting to an open operation when needed is considered sound surgical judgment and is in no way a failure.

There is very little difference in the recovery time between the open and keyhole operations.

You will be given one or more doses of antibiotics depending on the severity of your appendicitis. If your appendix is perforated or ruptured, you may need at least 5 days of antibiotics via the intravenous drip *in hospital*.

Occasionally I will find something other than your appendix that is causing your symptoms. Other causes of pain on the right side are:

- Problems with the ovary or fallopian tube cysts, infections
- Meckel's diverticulum an out pouching of the small bowel that can be inflamed
- Jejunal diverticulum as above
- Urinary tract infection
- Gastroenteritis especially a bacteria called Camphylobacter
- Inflammatory bowel disease
- Mesenteric adenitis inflammation of the lymph glands around the pancreas
- Twisting of a section of fat inside the abdomen
- Perforated large bowel diverticulum

Depending on what is wrong, I will then make a decision about what is best for your care. If the problem is simple, I will fix it at the same operation. This may also require a larger incision. If the problem is more serious but not immediately life threatening, I will often wake you up and plan surgery on another day after discussing it with you.

#### DO I NEED A COLONOSCOPY?

Sometimes, appendicitis may be caused by a cancer in the large bowel blocking the appendix. This might not be obvious at the operation to remove your appendix. If you are older than 50 I will recommend having a colonoscopy (camera passed around the large bowel) when you are recovered, to rule out this possibility.

#### WHAT ARE THE COMPLICATIONS OF APPENDIX OPERATIONS?

Complications after appendix operations are uncommon.

- Wound infections occur in approx. 5% of patients.
- Infections or abscesses forming in the abdomen after appendicitis do occur and may require further drainage with an operation or a procedure in x-ray.
- Damage to bowel, bladder or blood vessels, requiring open surgery and many weeks in the hospital. This can be very serious.
- Bleeding requiring transfusion.
- Other infections: pneumonia, urine, IV line related.
- Clots in the major blood vessel that supplies blood to the liver. This may cause permanent problems with the liver and bowels. It is rare but very serious.
- Clots in the legs that may travel to the lungs. (Deep venous thrombosis/ Pulmonary embolus) This may be fatal.

- Temporarily unable to pass urine you may require a urinary catheter for a day or two.
- Wound pain and prolonged numbness under the wound.
- Hernia of the wound.
- Bowel obstruction due to hernia or adhesions. This may occur at any time and the risk is lifelong.
- Allergic reaction to the antibiotics.
- Anaesthetic risks; there is a small risks of severe allergy, inhalation of vomitus, drug reaction and even death during an anaesthetic. (1/50,000). It is common to have a sore throat after your anaesthetic. There is a 1/500 risk of nerve injury to the arms or legs.
- Death: is very rare after operations to remove the appendix.
- If you are pregnant and need your appendix removed, there is a risk of pre-term labour, death of the baby or long term developmental problems in the baby like cerebral palsy. During pregnancy, the risks involved in not removing the inflamed appendix are much more than the risks of removing it.

#### WHAT TO EXPECT IMMEDIATELY AFTER THE OPERATION

#### **Pain Relief**

Every effort will be made to minimize the discomfort. The nurses will be monitoring your level of pain frequently.

It is very common to have <u>pain in the right shoulder</u> after keyhole surgery. This is due to the effect of the gas pumped into your abdominal cavity during the surgery. The pain typically disappears within one day of surgery.

On the first day after surgery, there may be a moderate amount of discomfort at the site of the operation. You will have a few choices for pain relief.

There are two major types of pain relievers after keyhole surgery.

#### 1. Panadol, Panamax, Paracetamol

You will be amazed the power of regular paracetamol. It will cut down the need for the very strong pain pills.

They do not cause constipation.

Do not take more than 8 tablets a day or serious liver damage may occur.

#### 2. NSAIDs (Indocid, Brufen, Mobic)

Provides excellent pain relief. They do not cause constipation.

Must be used very cautiously in the elderly and those with kidney problems because it might cause kidney failure.

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They may cause stomach ulcers. If you experience any pain in the upper abdomen you must stop this medication immediately and seek advice.

It is uncommon to need anything stronger than these medications after you go home. Try and avoid codeine or narcotic containing products – like Panadeine, Panadeine Forte or Endone as they cause constipation.

#### 3. Morphine, Fentanyl (narcotics)

It is uncommon to need an injection of these powerful painkillers after the first day of surgery.

We will discuss your take home pain relief requirements with you prior to discharge.

It is not usual to have to go home after appendix surgery with narcotic pain relievers.

#### **Drain tubes**

Sometimes you will wake up after surgery with a soft plastic drain tube in your abdomen. I will advise when this needs to be removed.

## **Eating**

If it was early appendicitis, you will be allowed to have fluids to drink four hours after you wake up and a light diet the following day. It is very common to feel slightly nauseated for 12 hours following surgery.

If you have perforated appendicitis, a diet may be introduced more slowly and you will not feel like eating too much anyway.

#### <u>Urinating/Bowel Movements</u>

After any surgery a patient may have trouble passing urine. This is not common, but if it occurs, is temporary. Occasionally a catheter needs to be inserted to help you pass urine.

There is usually some disturbance to your bowels in the week after surgery. It is normal for them to not be back in their normal rhythm for 2 or three weeks. Because of the strong painkillers you will be given during the surgery, constipation is the most common symptom. Daily laxatives like Movicol or Coloxyl are really helpful as are natural laxatives like prunes and Metamucil. Some patients may experience diarrhoea due to the antibiotics. This will usually stop as soon as the antibiotics do. Let me know if this is not the case as ongoing diarrhoea can indicate a serious infection.

#### **Activity**

It is very important to begin light activity shortly after surgery. This is to prevent pneumonia, clots in the legs and loss of general condition. You can expect to have to wear stockings on your legs whilst in hospital to prevent clots and have an injection of heparin twice a day under the skin for the same reason. Increase your activity as you feel better.

#### **Your Incision**

You can expect to have a waterproof dressing over your incision for the first five days. You will be discharged with this dressing on. You will be able to shower with this dressing. It is quite common to have a small amount of leakage from the wounds that may collect under the dressing. Occasionally this build up of fluid will leak from under the dressing. Wash the area if this occurs.

You can peel the dressing off 5 days after the surgery. The wounds should be healed by this time. You may get the wounds wet after 5 days. It is common for the wounds to be bruised.

There will be no stitches to remove. They will be of the dissolving type. It is very common for an end of the stitch to poke out of the wound. If it bothers you, you may snip it off with a pair of scissors. Otherwise it will fall off about 6 weeks after the operation.

Your incision may be slightly red along the cut. This is normal.

You may gently wash dried material around your incision and let water run over it. Use a towel to pat the wound dry. Do not rub soap or moisturizer into your incision for at least 4 weeks or until it is fully healed. After this you may rub vitamin E cream along the wound.

It is normal to feel a ridge along the incision. This will go away. It is normal to have a patch of numbness under the wound.

Over the next few months your incision will fade and become less prominent.

#### **Length of Stay in Hospital**

On average most patients will expect a 1-2 night hospital stay for early appendicitis. If you have perforated appendicitis you may need to stay in 5 days or more.

#### **Other Important Information**

You can expect to see your primary surgeon every day. On weekends or in times when your surgeon is operating elsewhere, you will see one of the practice partners. All are very experienced in this type of surgery and commonly assist each other in the operating theatre.

We will make every effort to keep you informed of your progress. We are always honest and open with you and your family. Feel free to ask questions.

## AFTER DISCHARGE

#### What can I eat after I have my appendix removed?

There are no restrictions on your diet. It is normal to have a reduced appetite for a couple of weeks after the surgery.

#### How you may feel

It is quite common to feel very tired and to want to have daytime naps for the first two weeks after surgery. Listen to your body and rest when you need to.

This is transient and can be expected to resolve in 2 – 4 weeks.

## **Activity**

Do not drive until you have stopped taking narcotic pain medication and feel you could respond in an emergency.

You may climb stairs and raise your arms above your head.

Do not lift more that 15 kg for 4 weeks after keyhole surgery. (This is about the weight of a briefcase or a bag of groceries). This also applies to lifting children, but they may sit on your lap.

You may start some light exercise when you feel comfortable.

You may swim after 2 weeks.

Heavy exercise may be started after 6 weeks - but use common sense and go slowly at first.

You may resume sexual activity when you feel ready.

## YOUR JOURNEY THROUGH THE OPERATING THEATRE

## **HOW YOU MAY FEEL BEFORE SURGERY**

Having a general anaesthetic (being fully put to sleep) can very scary for some people. It brings up issues about loss of control. People worry about what may happen when they are asleep.

Having an anaesthetic involves a lot of trust and in the end you will have to take a leap of faith and believe that you have chosen a team that will look after every part of your body. You should read this article if you would like to know exactly what goes on just before, during and after an anaesthetic for major surgery. For some people, understanding precisely what happens in the operating room brings a sense of calmness.

## CHECKING INTO THE OPERATING THEATRES

You will be greeted at the front desk by one of our friendly executive staff who will do the administrative paperwork. They will also collect any hospital excess you may have to pay. Please bring your health fund and Medicare cards. They will also want to know about your next of kin. With your permission I will call a nominated family member at the end of the surgery and the recovery nurse will also let them know when you are ready to go to the ward.

For major surgery, it is best that you remove <u>all</u> your normal clothes including your underpants and bra. This is so we don't lose them or mess them up with blood or antiseptic fluid during your surgery. You will meet one of the pre-op nurses who will help you change into your glamourous theatre gown and paper underpants. For abdominal operations, it is very common that you will wake up completely naked i.e. without your paper underpants. We often remove them in the operating theatre to keep them away from the area we are operating on. Your modesty will be protected as much as possible. Contrary to what you see in the movies, your bottom will not be on view out the back of your gown. Hospital robes wrap around your rear.

You will be measured and fitted with white, knee high stockings to prevent clots in the legs. For some operations, you may have a pair of pneumatic leg warmers placed on your calves to gently massage your legs while you are asleep. This prevents clots in the legs. The look is complete with a puffy paper hat. Any jewelry you would like to keep wearing, like a wedding band will be covered with tape.

You will be weighed and your temperature, blood pressure and pulse will be checked. You will be asked about your allergies and will be given an ID band that will stay on for your entire stay. The nurse will ask you if there are any implants or metal in your body. We ask this because we need to place an earthing plate on your body during the surgery and need to place it away from any internal metal.

You will then go through many repetitive identification processes to make sure we have the right patient and that everyone agrees on the operation you are having done. You will be put on a bed and you will wait and wait until it is your turn to be called into theatre. This waiting can be quite stressful, and you will feel hungry. You may want to bring something to do during this time. There is also a TV to watch and magazines to read. Rest assured we are moving as fast as we can and because unexpected events happen all the time, delays in hospitals are inevitable. It is possible to develop a headache due to caffeine withdrawal. This is not harmful, and you may have two Panadol with a sip of water to help.

Your clothes, glasses, valuables will be put into a bag and your belongings will be put into a locker whilst you are in theatre. You will be reunited with them when you return to your room in a ward or intensive care. If you have come to theatre from the ward, your belongings will stay in your room and await your return. If you are going to intensive care after the surgery, your belonging will travel with you.

## Why do I have to starve before surgery?

For an arranged operation, you must have absolutely nothing to eat or drink for six hours before you go to sleep. When you have an anaesthetic, all the muscles in your body relax. If you have food in your stomach, it can reflux back up into your mouth and even worse, your lungs. This can produce a life-threatening pneumonia. You must also not chew gum prior to surgery as this increases the fluid in your stomach. You may drink clear liquid up until 2 hours prior to your operation. I may give you a sugary drink two hours prior to surgery to help you feel less thirsty and speed up your recovery. It is OK to take your normal medications with a sip of water any time before surgery. It is also fine to brush your teeth.

#### **Special circumstances**

There are a few instances where certain precautions take place.

#### Latex allergy:

Please let the admission nurses know if you have a latex allergy. We need to remove all the latex products from the operating theatre to protect you.

#### If you take certain medications:

If you have recently had chemotherapy or take immune suppressing drugs like azathioprine or methotrexate, special measures will be taken to protect staff members against coming into contact with these drugs.

#### If you have certain bacteria on your skin:

Many people have bacteria living on their skin that have been given special names by hospitals. It is likely you will know this from a previous hospital admission. This does not mean you have an infection. We all have bacteria living in and on our bodies, some just have special names and some have a higher chance of being resistant to some antibiotics. It is best if these bacteria are not passed onto other patients as it promotes antibiotic resistance. If you are MRSA "golden staph", VRE, CRE or MRAB positive, then isolation precautions will be taken throughout your stay in the hospital.

#### If you have false teeth or plates:

Please leave these in. It makes it easier for the anaesthetist to help you breathe as you go off to sleep. If needed, the anaesthetist will remove them after you are asleep and they will be returned to you in recovery.

## TAKING YOU INTO THE OPERATING THEATRE

You will be wheeled around to the operating room by one of the theatre orderlies or a nurse. This is where you will say goodbye to your relatives. They will be next able to see you when you return to the ward. Because there are other patients in the recovery unit, relatives are not permitted.

The next stop is the anaesthetic room. This is a small cubicle adjoining the main operating theatre. The orderly will hand you over to the nurse assisting the anaesthetist. You will then have another identification check (you will be very good at reciting your name by this point).

Then the anaesthetist will arrive. They are the person with the good drugs that will make you relaxed, so be nice to them! If they have not met you earlier, they will go through your medical history again and what to expect. They may also explain some risks of anaesthesia, but because you have read this book, you will be aware of them already. This is not meant to scare you. It is our job to tell you about the good and bad aspects of surgery.

The only thing that will go into your body while you are awake is a small plastic tube in your hand called a cannula, drip or IV. This is a small needle and will hurt for a second or two. When it is in the vein, the needle is taken out and a soft plastic tube is all that is left. Once in, you should not be able to feel it. It is secured with tape and you may move your arm. The drip is used to give the medication that will put you off to sleep. If you are having an epidural for post-operative pain relief then this will be done prior to going off to sleep.

Occasionally, some patients have a severe needle phobia. This one small needle can create terrible anxiety. If this is the case, we can sometimes give the anaesthetic without a needle at the beginning. This is done by asking you to breathe on gas for a few minutes. You will drift off to sleep. The IV is placed once you are fully out and you will know nothing about it. This is a slower way to go off to sleep, but for some people avoiding a needle while awake makes a big difference.

Once the IV is in, you will be taken into the main operating theatre. This can be a confronting place too. There are usually 5 - 10 people in the room, all wearing masks and talking. We are all there to look after you. Most operating theatres are set up in a predictable way. There will be an anaesthetic machine with all the monitors to ensure you are safe. There will be several tables filled with surgical instruments ready to perform your surgery. There will also be nurses preparing this equipment and counting each and every instrument to ensure that nothing is missing at the end of your operation. There may also be junior medical staff and orderlies. The operating table is in the middle of the room under big lights. They will not be turned on until you are asleep. The table is narrow and cold. It is narrow because we need to stand close to you to operate and it won't be cold for long because during the surgery you will covered with a heating blanket.

The trolley you are on will be placed beside the operating table and if you are mobile, you will be asked to move yourself across onto it. The nurses will make sure you are not lying on your gown as it will usually need to be moved aside to expose the area we need to operate on. If you are in pain or not mobile, we will slide you across to the operating table on a special board or float you over on a noisy hover mattress. A lot of activity will then

happen around you. We will place padded boards on the side of the bed for you to rest your arms on. Your leg massagers will be hooked up and switched on and you will feel a gentle compression on your calves.

You will have three stickers placed on your forehead. This helps the anaesthetist monitor how deeply asleep you are. Sticky dots to monitor your heart beat will be placed on your chest. Fluid will be hooked up to your IV line and a clip that reads your pulse placed on your finger. A blood pressure cuff will be wrapped around your arm and the first time it takes your blood pressure, it will inflate very tightly. It will only do that once.

You may already be feeling happy, drowsy or talkative as the anaesthetist may have given you a relaxing medication via the IV. You will not go to sleep yet, but it is unlikely you will remember anything after this until you wake up in recovery even though you will continue to talk to us.

## WHAT HAPPENS DURING AN ANAESTHETIC

Sometimes knowing what happens during an anaesthetic really helps you relax and realize that you are well taken care of while you are asleep. Many people's greatest fear is the anaesthetic. They worry about vomiting afterward, being aware during surgery and not waking up. Whilst these things very, very rarely occur, having an anaesthetic is actually far safer than anything you have already done that day, like driving into the hospital.

## General anaesthetic consists of three phases

#### 1. Going to sleep – similar to taking off in a plane

Just before you go to sleep, the anaesthetic nurse will ask you to breathe into a mask and fill your lungs with oxygen. This makes sure that you have the maximal amount of oxygen in your blood. This does not put you to sleep. A white medication called Propofol is then given through your IV. The anaesthetist will ask you to keep your eyes open. As this medication goes into your veins, it can cause a stinging sensation in your arm. This is normal and does not damage you. After this injection you will be asleep in about ten seconds. Your breathing will temporarily stop and the anaesthetist will take over your breathing for you by blowing oxygen into your lungs. As soon as you are asleep and if you are having abdominal surgery, the anaesthetist will give a medication that stops your muscles moving. This has many functions. It allows your throat to relax so the anaesthetist can safely place the breathing tube into the windpipe. It also relaxes your abdominal muscles and makes surgery on the abdomen easier. If you have false teeth, they will be removed at this point and returned to you in recovery.

As soon as the muscle relaxer has worked, the anaesthetist will use a special tool called a laryngoscope. This is a smooth spatula with a light that is inserted over your tongue and deep into your throat. The anaesthetist will be able to see your vocal cords and beyond this is your trachea or windpipe. A specially designed hollow tube is placed down the spatula and into the wind pipe. A balloon on the end of the tube is inflated by the nurse to fully occlude your airway and stop any vomit or secretions from entering your wind pipe.

This is often the trickiest part of the anaesthetic and your life can depend on it. There are many signs the anaesthetist will look for before you go to sleep to predict whether getting this tube down will be difficult or not. If you have a small jaw, previous difficulties with intubation, neck problems, difficulty opening your mouth, the anaesthetist will be ready with a different strategy to get the tube down your throat safely. Because your breathing is our number one priority, occasionally putting the breathing tube down can result in damage to your teeth or cuts to your lips. All care is taken and this is uncommon. Having a tube in your throat can leave it sore and dry for a day or too. This is transient. You may also have a swollen uvula (the dangly bit at the back of your throat) for a few days.

Before the surgery starts, if appropriate, you will be given a dose of antibiotics via your drip to help lessen the risk of wound infection. Soft tape will be placed over your eyes to keep them closed and protected. There are other devices we use to monitor your wellbeing during surgery. Tubes like urinary catheters and IV lines will now be placed. Your arms and legs will be padded to protect your pressure areas and you will be positioned for surgery.

#### 2. Staying asleep during the surgery – cruise control

You will be kept asleep by anaesthetic gas piped in via the tube in your windpipe or by a continuous infusion of Propofol in your drip. The anaesthetic machine will steadily and precisely breathe for you. Your anaesthetist will never leave your side and constantly monitors your vital signs. They will give you small doses of medications and fluids to keep everything steady.

## 3. Waking up - landing the plane

As the surgery comes to an end, the anaesthetist will give you strong dose of pain killer, so you will wake up in comfort. They will turn the gas off and give a medication to reverse the paralysis. While you are still asleep, you will be transferred onto your bed. When you are breathing by yourself, the anaesthetist will remove the breathing tube and suction your throat. Patients rarely remember this. An oxygen mask will be placed on your face and you will be wheeled out to recovery.

# APART FROM THE SURGERY, WHAT ELSE HAPPENS WHEN I AM ASLEEP

If you have body hair on the area having surgery, it will be clipped off. Often a larger area that is needed will be shaved. An earthing plate will be placed somewhere on your body, so the electrocautery device can be used to stop bleeding as required. This will be removed before you wake up.

Just before surgery, everyone in the theatre will stop what they are doing and check once again your identity and the operation we are performing.

# WHAT SOME PEOPLE WORRY ABOUT BUT WERE TOO AFRAID TO ASK

#### What if I have my period on the day of surgery?

This makes no difference to you or us. Having a period is a normal part of life. I would suggest that you use a pad and not a tampon as it may be some time before you can change it. If you have any questions about this, ask the nurse who checks you in.

## My bladder feels full - will I wet myself?

Just before you go into the operating theatre, many people feel like they need to pass urine. This is usually anxiety. If you have gone to the toilet in the waiting area, it is very unlikely that you will need to go again.

For big operations, we will put a tube in your bladder that will catch all your urine. If you are having a smaller operation and still need to go once you reach the theatre, the nurse will take you to the bathroom.

It is a fact of life that some people occasionally wet themselves during the operation. It does not bother us and you will be cleaned up before you go to the recovery room.

## What if I think I am pregnant?

You must let us know at check in, even if you are only suspicious. If you are pregnant it is likely we will delay the surgery. If you are not sure, there are quick pregnancy tests available to check. It is essential that we know because the surgery and anaesthetic drugs can harm your unborn child and even lead to miscarriage.

#### I always vomit after an anaesthetic

Nausea and even vomiting can happen after an anaesthetic. It is such an unpleasant feeling that it may be an enduring memory of previous surgery. Post anaesthetic nausea is more common if you suffer with motion sickness. Your anaesthetist will discuss this with you and there are many strategies to avoid this troubling side effect.

#### What if I am breastfeeding?

Breast feeding should not stop you from having a surgery you need. Very small amounts of anaesthetic and pain relieving drugs will pass into your breast milk. Theoretically, this is low risk for your baby. Anaesthetic guidelines suggest you pump and discard breast milk for 24 hours after an anaesthetic. Your baby will need to be fed with previously pumped milk or formula. It is almost certainly perfectly safe however to feed your baby less than 24 hours later. Whether you are up to it of course is another matter. Occasionally, surgery may cause a decrease or even cessation of your milk supply.

### Who will be in the operating theatre with me?

It is necessary for your safety for a number of staff, both male and female to be in the operating theatre both before and during you surgery. In addition to your surgeon and anesthetist, there may be junior doctors, a number of nursing staff, theatre orderlies and x-ray technicians. As this is a teaching facility there may be medical students present.

All of these staff are highly professional. There are definitely moments where you will be exposed whilst preparing you for surgery, but extreme efforts are made to preserve your modesty.

## Do you play music while I am asleep?

No. We are concentrating on your care. Music tends to be a distraction. There are many sounds of machines and monitors in the operating theatre and we are listening to those. We also need guiet to enable communication between staff.

## What if my bowels work while I am asleep?

This is quite uncommon. If it does occur however, you will be cleaned up prior to moving to recovery.

## I am worried about waking up during the operation

Awareness during anesthesia is exceptionally rare. Making sure you are fully asleep is the anaesthetists' main objective. There are a number of monitors and alarms that you will be hooked up to absolutely ensure that this doesn't occur.

#### I am on the oral contraceptive pill

There is a medication given as the end of some anaesthetics that can interfere with the effectiveness of the pill. Please tell your anaesthetist if you are on the pill. If the medication is used, then you will need to use an alternate contraception for two weeks to avoid pregnancy.

#### I am worried about my memory after the anaesthetic

There is no doubt that a condition called post anaesthetic cognitive disorder is a real thing. It is more common on patients over 60 and it can result in memory loss that may be permanent. It is not fully understood. If you have concerns, your anaesthetist would be happy to discuss it with you.

#### **RECOVERY – THE WAKE-UP ROOM**

When you wake up, is likely that you will be wearing a gown but be completely naked underneath. You will be covered with a blanket.

The recovery room is the first thing most patients will remember after going to sleep. It will almost be like no time has passed.

You will have a nurse by your side monitoring your vital signs. You will stay in recovery until you are fully awake and your observations are within normal limits. The nurse will monitor your pain and keep you comfortable.

If you have a catheter in your bladder, you may feel a need to pass urine. This feeling will go away.

As you wake up you may have a tube in your throat that the nurse will remove. It is unlikely you will remember this.

If you snore you may have a small tube in your nose or mouth to help you breathe until you are fully awake.

If you have false teeth, they will be returned to you in recovery.

Your family is not allowed in recovery so we can respect the privacy of other patients.

#### RETURN TO THE WARD

When you return to the ward you may be drowsy, nauseated or in pain. Your nurse will be monitoring these things closely.

They will be checking you pulse, blood pressure, temperature and dressings regularly for abnormalities.

There is a very strict criteria of observations that the nurses must follow. If you fall outside these criteria for any reason the nurses must notify the medical team. Very often this is just a false alarm. It may sometimes seem dramatic, but it is done for your safety.

If you are on strong pain killers like morphine or Fentanyl you will be required to wear an oxygen mask.

## **HOW DO I HANDLE MY ANXIETY?**

Every person suffers from some level of anxiety. You are not human if you do not. Having an operation is up there in the top ten of major life events. A little bit of anxiety can be good thing. It can make you hesitate before taking a misstep. When anxiety gets out of control however, it becomes a medical problem and stops you doing things that you should or want to do. Some people suffer anxiety about many things and for some it can be an issue only in certain situations.

Common symptoms of anxiety are

- Overwhelming negative thoughts
- Sleepless with worry
- A constant stream of bad thoughts "the chatter"
- Physical symptoms such as chest pain, nausea, headache

There are many techniques to address your anxiety. There are mindfulness, meditation and distraction techniques. Sometimes anxiety is so bad that medication is needed.

It is normal to be anxious before surgery but if the feeling of anxiety is overwhelming please talk to me or your GP about it. Help and suggestions are also available at Beyond Blue: www.beyondblue.com.au

## **ABOUT YOUR SURGEON**

## A/Prof Kellee Slater MBBS (Hons) FRACS FACS

2018 Associate Professor

University of Queensland

2015 Fellow of the American College of Surgeons

2017-2019 National Chair of the Australian Board in General Surgery

2006 – Present Staff Surgeon

Hepatopancreatic-Biliary-Liver Transplant

Princess Alexandra Hospital and Greenslopes Private Hospital

Brisbane, Queensland

2004 – 2006 Hepatobiliary and Liver Transplant Fellowship

Princess Alexandra Hospital

Brisbane, Queensland

2002 – 2004 Liver and Kidney Transplant Fellowship

University of Colorado Hospital

Denver, Colorado, United States of America

2002 Fellow of the Royal Australian College of Surgeons (FRACS)

General Surgery

1989 – 1994 MBBS (Honours)

University of Queensland