Chapter 4

Nursing Care in Theatre

Preparation for theatre

All patients should be prepared for theatre by the ward staff the day before their operation. This preparation includes having had a successful enema to clear the bowel of faeces for those patients with an RVF or perineal tear or, if instructed, for VVF repair. Patients should have an IV cannula in situ, be showered and be wearing a clean theatre gown or clean sheet wrapped around them. They should be wearing a name band and have completed a consent form for surgery after having received counselling as to what is involved in the surgery. Most will be fasting from the night before in case the mode of anaesthesia needs to be changed from spinal or saddle anaesthesia to a general anaesthetic.

Figure 29 Patients prepared for theatre

Patient safety

Patients will be called to theatre by the nurse or anaesthetist in charge of the theatre according to the operating list for the day. The patient's records should accompany them to theatre. The patient is then handed over to the theatre staff by the ward staff after they have completed a theatre checklist to confirm that this is the right patient for the correct operation. Having a name band with the patient's name on it allows staff members to check they have the correct patient if the patient is under general anaesthesia. It should be confirmed that the patient has fasted for at least 6 hours, has had an enema, if required, and her blood results are available. The patient's observations – that is, blood pressure, pulse, temperature and respiratory rate – should be reviewed pre-operatively.

The theatre nurse who escorts the patient into theatre, should talk to her in a calm manner to reduce the patient's anxiety and help her to feel safe. The patient is shown and assisted onto the operating table where she waits for anaesthesia.

Most patients will be given a spinal anaesthetic unless this is contraindicated. Patients requiring an abdominal approach to surgery may be given a general anaesthetic. It is not uncommon for an operation to start with the patient being under spinal anaesthesia, but to convert to a general anaesthetic if the spinal starts to wear off, particularly if the operation is difficult and takes longer than expected.

Once the anaesthetic is successful, the patient will be positioned on the operating table for surgery.

During the operation, there should always be a nurse by the patient's head, checking they are breathing well, not in pain and to offer reassurance. Observations (blood pressure, pulse, oxygen saturations if available) should be taken every 15 minutes and recorded on the anaesthetic sheet. Changes in the observations should be reported to the anaesthetist and surgeon.

There should be a 'runner' available for each case in theatre. This is someone who is available to get what is required for the operating team such as sutures, gauze or extra instruments.

When in theatre, particularly if there are two operations ongoing, everyone should be respectful and concentrate. Mobile phones should be turned off and the sound kept to a minimum, so that

communication between the operating, anaesthetic and floor teams is easy.

Positioning the patient on operating table

Most fistula operations are carried out with the patient in the Trendelenburg position. The Trendelenburg position has the patient lying on their back with their head at a downwards tilt. The patient is also placed in the lithotomy position, which involves flexing the hips, abducting the legs and flexing the patient's knees. The legs are secured in leg supports. To check the legs are in the correct position in the stirrups, it should be possible to fit two fingers between the patient's leg and the stirrup. It is important to take care that the patient's legs are not compressed by the stirrups, particularly just below the outside of the knee (where the posterior tibial nerve is situated on the bone and compression can cause footdrop), in the back of the thigh or calf muscle (where compression can cause a deep vein thrombosis). In order to prevent peripheral nerve injury, after 2 hours of the patient's legs being raised on the operating table a 10 minute break, allowing the legs to be lowered and the bed to be flattened, is recommended.

The patient's arms are placed on padded arm boards. The shoulders are supported with shoulder pads to stop the patient from slipping down the operating table when the table is tilted head downwards.

lt is important to reassure the patient that they are safe on the operating table and will not fall, particularly when in a head down position.

For patients with 3rd and 4th degree tears or RVF, a reverse Trendelenburg or a supine position to provide the best access for surgery may be used.

Safe positioning requires planning and good communication between the anaesthetist, the surgeon and the theatre assistants. It is essential to flex both legs at the hips and knees at the same time (one person per leg) to avoid dislocation of the hip joints or neural damage by stretch or direct pressure. This means having enough staff to facilitate safe positioning at the beginning and end of a surgical procedure.

An abdominal surgical approach, used for re-implantation of ureters, requires the patient to lie in a supine position. This involves the

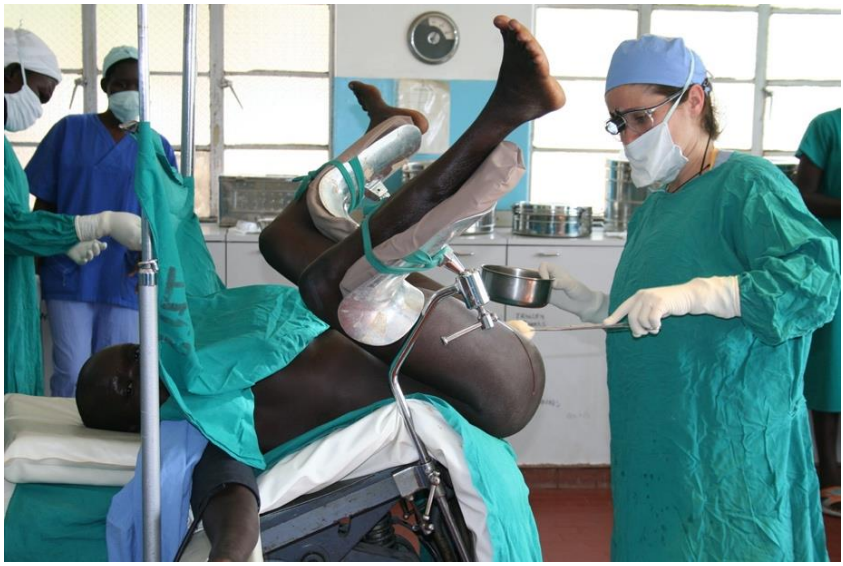

Figure 30 Ideal position on operating table for fistula surgery

patient being placed on their back during surgery with their arms supported on the arm boards.

In a few cases, such as operations for stress incontinence or complex fistula, a combined abdominal and vaginal approach is needed. In these circumstances the Lloyd Davis position, an adaptation of the lithotomy position where the hips are abducted and the knees semi-flexed, is used.

Privacy and respect

During fistula surgery it is not uncommon for there to be more than one patient being operated on at a time in the same operating room. If several fistula surgeons are working together, it is possible to run two operating tables at once, allowing for a greater number of patients to be treated in a short time frame.

In such circumstances, respect and privacy for each individual patient should be paramount with screens used between operating tables. The use of theatre gowns or a clean sheet wrapped around the patient aids greater privacy, as these can be kept on during the operation while the rest of the body is covered in surgical drapes.

Figure 31 Privacy obtained using screens between operating tables

No patient should be expected to walk into a theatre completely naked and climb onto an operating table. Again, always preserve the patient's dignity (treat patients as you yourself would want to be treated).

Scrub nurse

The scrub nurse in theatre works closely with the surgeon and performs a surgical hand scrub before putting on a sterile gown and gloves. The nurse is expected to follow the surgical procedure and hand over the necessary instruments as required. A safe working area is created by covering the patient with sterile drapes and having a sterile work surface for the instruments, creating a barrier between the wound and surrounding germs with the aim of preventing post-operative infection.

A highly skilled scrub nurse will know all the instruments used in fistula and perineal surgery. They will often be 'one step ahead' and thus able to pass the surgeon the next instrument with very little communication between them. The instrument trolley is organised with the sharps being kept together at one corner of the trolley and the instruments laid out in order. The scrub nurse will also

Figure 32 Scrub nurse and surgeons working closely together

communicate with the theatre ‘runner’ if additional items are required or sterile packs should be opened.

It is good practice to count the number of instruments on the trolley, the number of sharps and the number of packs. This is particularly important for abdominal surgery to ensure that all items are accounted for, and that none have been left inside the patient. Gauze

Figure 33 Example of a well organised trolley

swabs should be avoided for laparotomies, and packs should be attached to artery forceps. Gauze swabs are used for operations via the vagina. The surgeon should check carefully at the end of the procedure that no swabs or instruments have been left in the vagina or the wound.

There should be three trolleys set up for each operation. The first trolley contains the gown pack and the second trolley holds the instruments. A third trolley is required for extra instruments that may be needed including a catheter and urine bag, freshly made blue dye and 'jungle juice', which is a mixture of adrenaline with normal saline (2 ml of 1:1000 adrenalin in 500 ml normal saline) that can be injected into the surgical site. This helps reduce bleeding during surgery.

Instruments

A well run and organised theatre will have specific instrument packs assembled and sterilised for the fistula, laparotomy and perineal tear operations scheduled for that day of surgery. In addition, there should be adequate sterile gowns and drapes before surgery starts.

For each pack, the theatre assistant should count and write down the number of instruments in the set. This enables accuracy in the instrument count at the end of surgery. It also helps to prevent instruments from going missing.

Instruments needed for fistula surgery using a vaginal approach:

- Towel clips 7
- Surgical blade holders 2
- Needle holders 2
- Uterine sound 1
- Toothed dissecting forceps 1
- Non-toothed dissecting forceps 1
- Metal catheter 1
- Ureteric probe 1
- Dissecting scissors 4 (straight, curved)
- Allis forceps 6
- Small artery forceps 6
- Long artery forceps 4
- Auvard self-retaining speculum 1
- Sims speculum 2
- Sponge-holding forceps 2
- Stitch scissors 2
- Stitch holder 2

- Kidney dish 2
- Gallipot 1
- Tenaculum forceps 2
- Vulsellum 1
- Babcock 1
- Ruler

A fistula instrument set such as the FIGO Fistula Repair set should be available for use in a fistula treatment facility. However, in the surgical camp environment, the surgeons may have their own instruments that they operate with. These instruments need to be cleaned and sterilised and be available for use if required.

A standard laparotomy set is used for abdominal surgery.

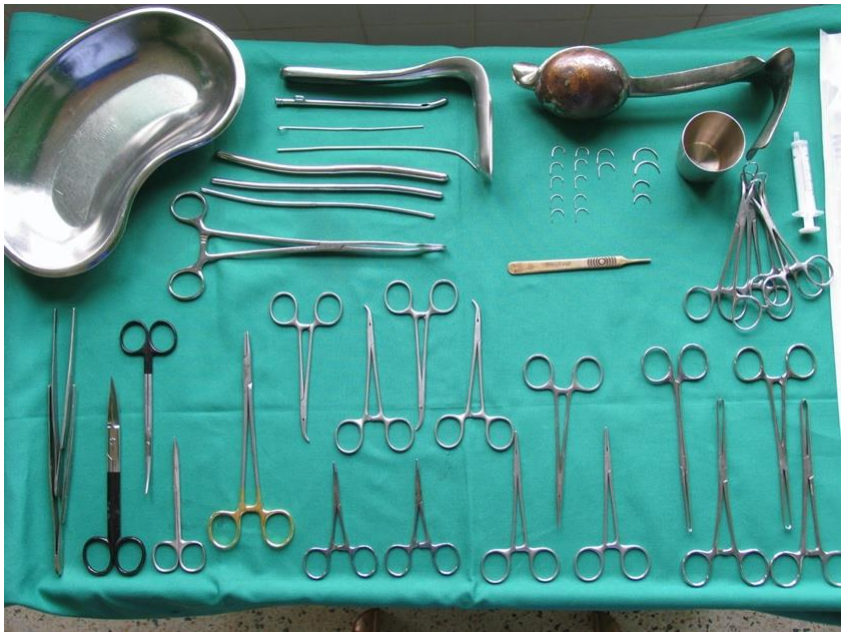

Figure 34 Instruments for fistula surgery

Figure 36 Example of a FIGO fistula instrument set

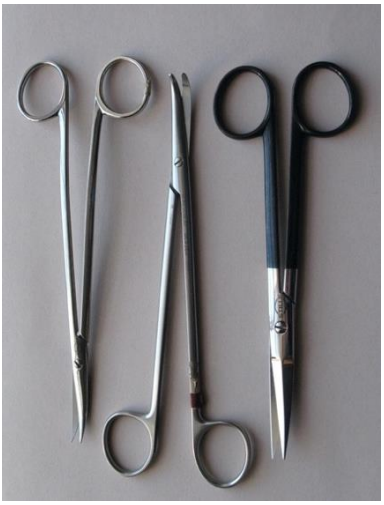

Figure 35 Specialised scissors for fistula surgery

Sutures

There are several different sutures used for fistula surgery; however, most surgeons will have a preference for which sutures they use.

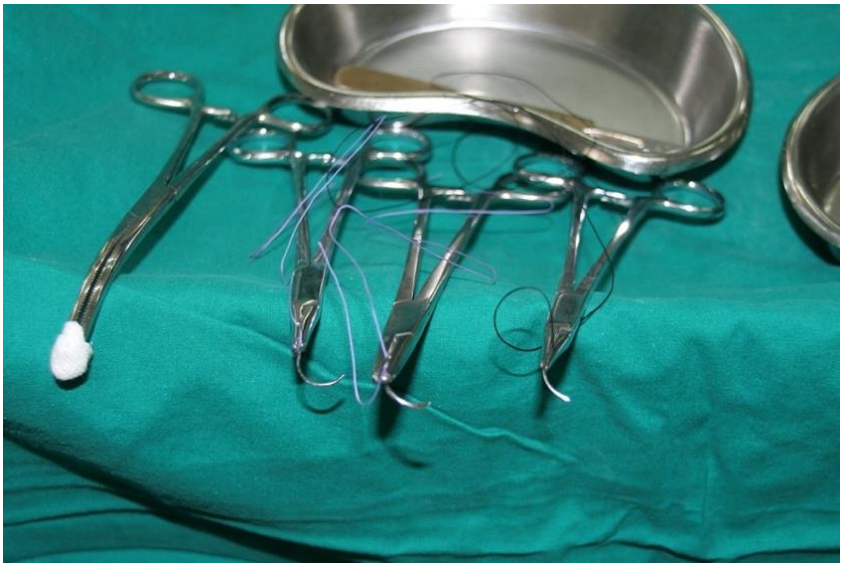

Figure 37 Different sutures used in fistula surgery

Fistula sutures include:

- Vicryl 2.0 (5/8 needle), 2.0 (1/2 circle needle)
- Vicryl 3.0, 0 &1
- Silk 2.0
- Polysorb 3.0

Sutures used for 3rd and 4th degree tears:

- Vicryl or Polysorb 3.0, 4.0, 0
- PDS 2.0

Completion of surgery

Once surgery has been completed, but before the surgeon closes the wound, the instruments should all be counted to make sure there are none left inside the patient. A Foley catheter is inserted into the bladder, ensuring that the balloon is inflated with 5–8 ml of sterile water or saline. A urine bag should be attached to the catheter making sure that the bag's emptying valve is closed. The catheter should be securely strapped on the patient's abdomen to ensure there is no pulling on the catheter balloon, which may damage the repair. You should ensure that the plaster strapping runs from the right to left hip bones. This makes sure that the tape remains secure when the patient bends over.

The catheter bag should be checked to make sure it is not kinked or caught anywhere and that there is no traction on it before transferring the patient off the operating table and onto a trolley. The urine should be draining and clear.

The patient will have a gauze pack inserted into the vagina to prevent and soak up any bleeding after surgery. It is important to document in the surgical notes the number of vaginal packs used to ensure they are all removed by the ward staff the following day. When inserting the vaginal pack, it helps if a small corner is left outside the vagina. This makes it easier for the ward staff to remove and for the patient to be aware that it is there.

During the handover of the patient from the theatre staff to the ward staff, any specific post-operative instructions should be passed on. These will include information on how the operation went and whether a blood transfusion is required. Any requirements for additional IV fluid or whether any specific extra close monitoring is needed.

Moving the patient from the operating table to the trolley, and also from the trolley to the ward bed requires at least four people: one at the head, one at the feet and one or two on either side. The patient should be rolled carefully onto a sheet and gently moved sideways onto the trolley or bed. The patient will either be sedated or numb from the waist down and will be unable to protect her wounds. She must not be bumped across the table, as this risks pulling out catheters or rupturing the repair and potentially ruining the good work which has just been done.

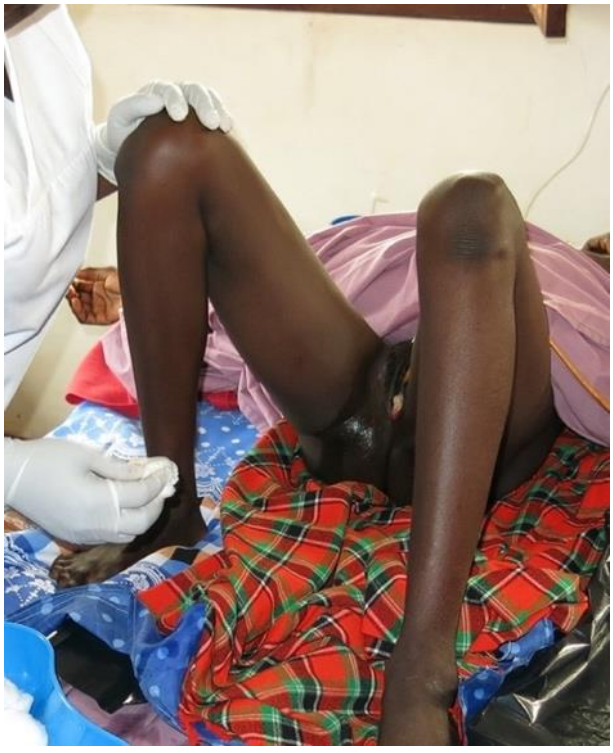

Figure 38 Gauze visible from the vaginal pack