4 Pre-operative Preparation

Is the Patient Fit for Operation?

Findings will vary from country to country. In Uganda, most patients are found in good general condition and ready for operation after a day's preparation. In Ethiopia, more patients are weak and malnourished, and a few have contractures. It is always advisable to improve the patient's general condition by improved nutrition, iron and vitamin supplements, de-worming, and treatment of any other diseases first. Contractures should be treated before surgery if possible. I have treated a number of fistula before the contractures have been treated but it is difficult to get the patient into a suitable position to operate and gain adequate access to the fistula.

Haemoglobin should be estimated. It should ideally be above 10gm/dL, but lower levels can be accepted for simple cases, where blood loss should be minimal. For difficult cases, blood should be taken for grouping. Transfusion is occasionally advisable but generally it's simpler and safer to investigate causes of anaemia and treat, and add iron and wait. John Kelly published a paper in 1993 showing that an Hb less than 8gm/dL was associated with a higher breakdown rate.

Not surprisingly several studies have confirmed that many patients suffer from severe depression (see Chapter 1—Mental Health and Further Reading). Sympathetic handling is called for, but no amount of 'counselling' will improve a patient's mental state until she has been cured of constant incontinence.

Neurological Damage and Physiotherapy

Neurological damage is a marker for a severe injury and it almost always marks the presence of a recto-vaginal fistula as well. At the extreme, the patient may be unable to walk immediately after delivery due to ischaemia to the lumbar-sacral plexus. (Figure 4.1) Immobility may lead to pressure sores, compounded by the presence of saddle anaesthesia.

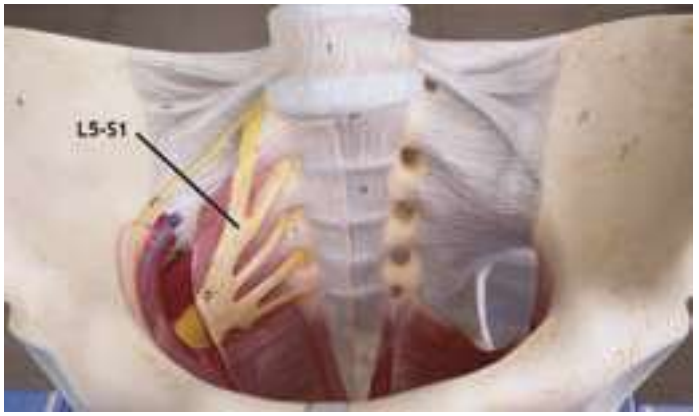

Figure 4.1
L5–S1 roots are prone to injury from obstructed labour.

With good nursing care, the majority of patients improve. (Figure 4.2) With good nutrition and active and passive movements of all joints, motor power and sensory loss will improve, although foot drop (due to damage to the L5 root) will be the last to recover. At two years 87% have recovered. The provision of splints prevents contractures in plantar flexion. However, they should not be a substitute for putting all affected joints through a full range of movement several times daily. Residual foot drop, especially if a fixed plantar flexion has been allowed to develop, is a serious disability that will impair the patient's ability in daily activities.

Figure 4.2
a) This patient presented just two weeks after her delivery and she could only crawl. She had both a vesico-vaginal and recto-vaginal fistula. b) After one week of physiotherapy, exercise and encouragement she could walk with support, although she had bilateral footdrop. The patient was operated on, both fistulae were closed but she had some stress incontinence, she went home walking without support. At six months she had mild footdrop on only one side and her mild stress incontinence remained.

It is easy to understand how, in the absence of any medical help, contractures form, especially if the patient has been rejected and lies in one position for days on end, hoping that the incontinence will stop. (Figure 4.3) This is particularly prone to occur in Ethiopian society, where many of the patients were child brides in remote areas. About 2% of patients presenting at the Addis Ababa Fistula Hospital have severe contractures. These require months of passive stretching exercises before they are fit for repair. A dedicated physiotherapy department enables severe contractures to be considerably improved in time. (Figure 4.4)

Figure 4.3
a) Thankfully we rarely see contractures like this any more. They used to be more common. This lady had been lying in a sack for six months. The fistulae were repaired before she could walk, on a camp model of repair.

Continued

Figure 4.3 *(continued)*
b) She returned to the next fistula camp, cured of her incontinence but she hadn't continued her physiotherapy and was still unable to walk.

Explanation

Clearly, the patient must be prepared for what is going to happen in the operating theatre and must give her consent. She must be informed about the length of the post-operative stay, the duration the catheter will be kept in and the restrictions on her activities. She and her attendant must understand that they should not rush off home immediately after the catheter is removed. Those who operate on difficult cases would be wise to warn the patient of the limitations of surgery in achieving a cure, including the risk of ongoing incontinence, so that expectations are not raised too high. This can be difficult to explain. Most fistula patients have had very limited education if any at all. A great deal of patience and empathy is needed.

Bowel Preparation

It is best to have the rectum empty during the operation in case there is any leakage though the anus. In ideal circumstances, the patient

Figure 4.4
Some centres have well equipped physiotherapy departments which are crucial in helping patients become mobile and strong.

would have an enema the day before, but in reality enemas are forgotten or given at the last minute—often leading to contamination during the operation. It is much better to give no enema at all and simply have the patient fast from midnight before the operation and be sure that she has opened her bowels before coming to theatre—this is my policy for bladder injuries.

In recto-vaginal fistula or sphincter repair cases an enema does need to be given the evening before operation and the patient must be kept on a fluid only diet the day before.

In the uncommon event of troublesome anal leakage, I administer an enema in theatre, clean up and insert a temporary anal purse-string suture, and carry on operating. Do ensure you remove this suture at the end of the procedure. The faecal leakage will contaminate the operative site and so for these cases I give a dose of metronidazole with my usual prophylactic antibiotics in theatre and continue it for 24–48 hours after the operation.

Post-operatively check the patient regularly. She may continue to leak faeces in bed after the procedure, that is while the spinal anaesthetic is still working and she can't get up to go to the toilet. The leakage can contaminate the operative field.

Hydration

Left to her own devices, the patient will come to theatre dehydrated, as she will be trying to reduce her wetness. This is bad for a number of reasons:

- She may be hypotensive under a spinal anaesthetic.
- It increases the difficulty in identifying the ureteric orifices.
- Urine output will be poor after the operation, predisposing the patient to catheter blockage. More intravenous fluids will be required during and after the operation. Which is expensive.

Therefore, as soon as the decision is made to operate, ask the patient to start drinking plenty of mixed fluids, stopping only 4 hours before the operation. If she has been drinking sufficiently, urine should drip when she stands with her legs apart. (Figure 4.5) Before she goes to theatre, set up an intravenous infusion of saline.

Be aware of the very rare but serious condition of hyponatraemia.
(See Chapter 11-Drinking)

Figure 4.5
A well hydrated patient. She is dripping urine. (Photograph courtesy of Kees Waaldijk)