

## 12 POSTOPERATIVE CARE OF THE FISTULA PATIENT

A good operation can be ruined by neglectful aftercare. It is the surgeon's responsibility to ensure that the nurses and carers know what is required. In reality, nurses will be in short supply and may not have seen a fistula repair before.

The patient must at all times be:

- draining
- drinking
- dry

### Drainage

Free drainage of urine at all times depends on adequate catheter care. If a catheter blocks, urine may pass alongside it or, much worse, find a way through the repair. Then the scene is set for failure.

### Principles of catheter care

- Nothing must pull on the catheter.
- The catheter must not become blocked or fall out.

The catheter is secured in theatre with a suture to the labia. This prevents accidental traction on the catheter as the patient is moved from the theatre to the ward and at other times. The catheter may additionally be strapped to the thigh to prevent discomfort due to the labial suture (Figure 48). However, strapping alone is not enough – it easily comes off.

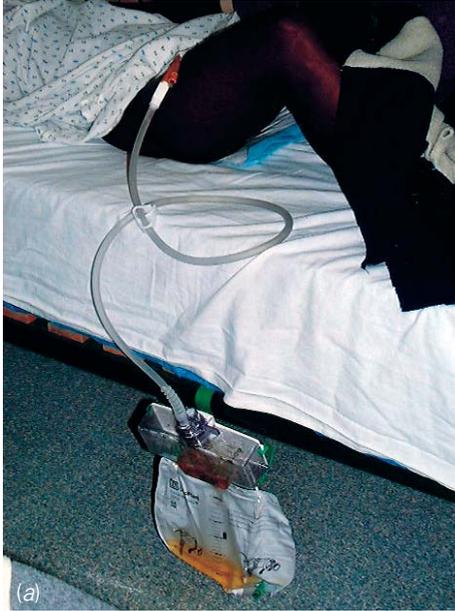
### Drainage bags or not?

Closed drainage is ideal if the nursing care is excellent and good-quality bags



**Figure 48** Strapping to the thigh is acceptable to prevent discomfort from the suture through the labia.

are available (Figure 49a). However, these conditions are not often met in Africa. In addition, a number of problems may arise when drainage bags are used (Figure 49b,c), although some can be circumvented (Figure 49d) and a bag can have advantages (Figure 49e).



**Figure 49** (a) This high-quality system is ideal, but is expensive and would rarely be available in an African setting. (b) This bag has already become full and if further neglected will overflow and pull loose from the bed, pulling the catheter out of the patient. (c) This bag will soon fall off the bed and pull on the catheter. (d) With long tubing, the bag can lie on the floor.



**Figure 49** (e) A good-quality drainable bag does make ambulant care easy. (f) Open drainage

In general, however:

- Unless there is no doubt that staff can look after a drainable bag, a simple alternative should be employed.
- The simplest safest option is open catheter drainage.

In the latter, the catheter is connected to plastic tubing and drains directly into a basin under the bed (Figure 49f). The patient can move freely in the bed and nothing will pull on her catheter. It is easy to see that urine is draining by watching the drips, and little can go wrong at night.

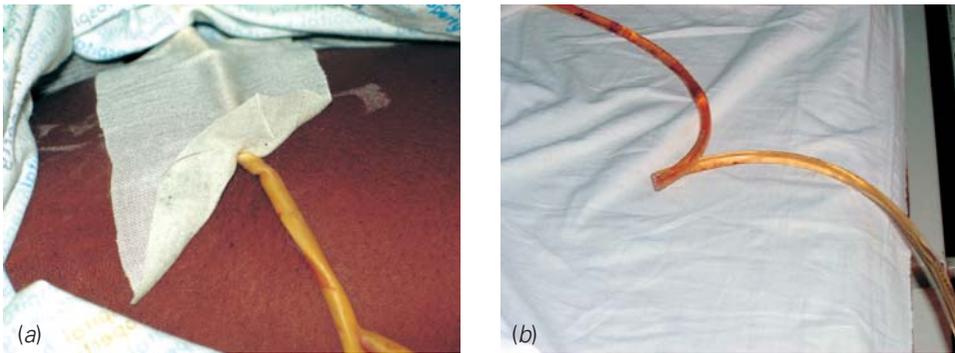
### **Blocked catheter**

This is an emergency! The symptoms and signs of a blocked catheter are:

- The patient feels a full bladder.
- She is wet (due to leakage around the catheter or through the repair).
- Urine stops dripping into the basin. This would not be noticed for some time when closed drainage is used.

Action must be taken immediately:

- Examine the catheter – it may be twisted or blocked (Figure 50). The remedy is to change the tubing and make the patient drink more.



**Figure 50** (a) A twisted catheter. (b) A kinked catheter. Note that the urine is concentrated and contains cloudy deposits.

- Examine the patient. Is the bladder palpable? If so, unblock the catheter at once by gentle irrigation with a bladder syringe. If this does not work, change the catheter. If there is any doubt about drainage, always irrigate the catheter.

## Drinking

A high fluid intake is essential. This should start before operation and continue until after removal of the catheter. This means at least 4–5 litres a day. Many patients may be reluctant to drink. They have been accustomed to drinking little to reduce their wetness. They may be afraid that drinking too much will spoil the repair. Reassure them.

Concentrated urine predisposes to urinary infection and to accumulation of debris, which predisposes to blockage.

There is no need to record urine output except for the immediate postoperative period. With the open drainage method, it is easy to see at a glance whether the patient is drinking enough (Figures 51 and 52) – look for the drips and look at the colour.



**Figure 51** (a) The urine should be like water. (b) This urine is too concentrated.

## Dryness

The patient must be dry. Possible causes of wetness are:

- A blocked catheter: this is serious but easily remedied. It should be uncommon if the patient has a high fluid intake.
- A failed repair: this should be very unlikely if the surgeon has selected an easy case and repaired it well. If there is any doubt, a dye test should be performed.
- Urethral leakage: as well as draining via the catheter, urine will sometimes leak alongside it, which may suggest that the urethra has poor function. Careful inspection of the urethra while performing bladder irrigation will identify this problem.
- A second fistula has been missed: a simple low vesico-vaginal fistula may coexist with an intra-cervical or a ureteric fistula (both could be iatrogenic at the time of a Caesarean section or hysterectomy for a ruptured uterus). Note that a dye test at the end of the repair should reveal the uterine fistula (unless it is tiny), but would not show a ureteric leak.

A simple record of the patient's operation and a postoperative care plan should be kept on the foot of the bed or on the wall where it can be easily seen by all (Figure 53).

## Other aspects of postoperative care

### Perineal toilet

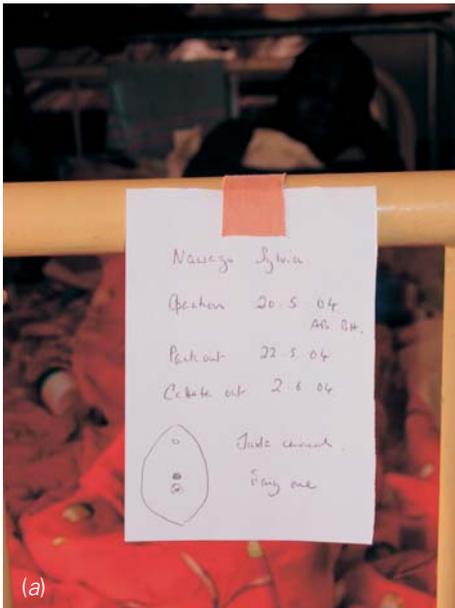
Twice daily vulval washing is essential, paying particular attention to the catheter as it comes out of the urethra.

### Vaginal packing

This should be removed on day 2 (the day of operation is day 0).



**Figure 52** Make sure that the patient has a plentiful supply of water and look for the urine dripping into the basin.



(b)

**Figure 53** (a) A record can be kept on the end of the bed. (b) Alternatively, a record can be fixed to the wall.

### Mobilization

The patient is allowed out of bed after removal of the vaginal pack. If she has open drainage, she can use a bucket to collect urine and can carry this around with her (Figure 54). This works perfectly well, but remember to keep the patient drinking lots of fluid.

### Removal of the catheter

Many surgeons leave the catheter in for 14 days after all fistula repairs, but for simple ones 12 days are sufficient.



**Figure 54** Patients up and about with their buckets.

Just before the catheter is due to be removed, it is advisable to perform a simple dye test on the ward or in theatre. Provided that there is no leakage, simply remove the catheter in the morning and encourage the patient to pass urine at least every 2 hours. Later, as her bladder becomes accustomed to distension, she will be able to hold on longer.

Some people advocate bladder training, by which they mean intermittent clamping and unclamping for 48 hours before the catheter is due to be removed. This can easily go wrong if instructions are misunderstood, and I am not convinced there is any benefit in this regime.

### Has the repair failed?

A leak requires a dye test unless gentle irrigation demonstrates leakage around the catheter. A leak from the vagina on dye test indicates a failure – but all is not lost.

#### Early leak – in the first week

This is bad news, and usually means that the repair has failed. It should be rare after the easy repairs described here, but will be more of a problem as the difficult ones are tackled. If more urine is draining through the catheter than the vagina, it is worth keeping the catheter as long as this is the case in the small hope that healing might occur.

#### Late leak – in the second week or later

Occasionally, even simple repairs develop a leak during the second week. This may be a secondary breakdown due to infection. In these cases, as the fistula margins are not under tension and have a good blood supply, there is every chance that the defect will close with prolonged bladder drainage. Keep the catheter in for up to 3–4 weeks in total as long as the leak is diminishing.

#### The later the leak, the better the prognosis

It may help to keep the patient in bed lying and sleeping face down (Figure 55). In this position, the hole in the base of the bladder will be uppermost and the catheter tip will be below it (i.e. sump drainage).

One of my patients was discharged home dry after 14 days, but returned wet for my next visit 6 months later.



**Figure 55** Nurse the patient prone if she has a secondary breakdown.

She said she had become wet the day she arrived home and attributed this to the long walk. If only she had returned and had a further period of catheter drainage, the secondary breakdown would almost certainly have healed.

It is a good idea for patients to stay for a few days after removal of the catheter, especially if they have come far.

## Predischarge advice

### **Abstinence from sexual relationships for 3 months**

Occasionally, we see patients who went home dry but report a leak developing after a few weeks. Perhaps they were not able to abstain.

### **Caesarean section for all future pregnancies**

Do not forget to discuss family planning issues, including tubal ligation where relevant. Future pregnancies must be delivered by Caesarean section. If the obstructed labour was due to a malpresentation, the patient could in theory deliver vaginally in future, but as skilled obstetric care is rarely available, it is best to insist on a Caesarean section for all subsequent deliveries. From time to time, we do see patients with a recurrent fistula because they have not been able to get to hospital for this.

### **Return for follow-up consultation**

It is so important for surgeons to know their results that patients should be given financial help to return. One can only really know one's results if the patient returns for a follow-up visit. Make sure that you see the patients yourself if possible.

## Possible late problems

### **Urinary infections**

These should be uncommon, provided that a high urine output is maintained. A late postoperative infection could be caused by a stricture with retention or by a missed bladder stone. Where limited laboratory facilities exist, inspection of the urine should be enough to make the diagnosis.

### **Stress incontinence**

A little leakage for the first few days after catheter removal is quite common, but permanent stress incontinence should be rare after repair of a simple fistula unless the urethra was short.

Stress incontinence is unfortunately common after repair of complex fistulae where there has been significant destruction of the urethra and loss of bladder volume.

Pelvic floor exercises may help, but only if there has been minimal destruction of the normal continence mechanism. There are a number of surgical options for treatment of stress incontinence after fistula surgery, with only a modest success rate.

### **Stricture**

Any patient who had a stricture of the proximal urethra at the time of repair is at risk of postoperative stenosis. Any urinary symptoms require examination of the urethra with dilators. Small Hegar dilators are ideal for this. Small strictures should yield readily to dilatation. Regular dilatation will prevent the stricture from becoming resistant.

### **Sexual difficulties**

In spite of a good repair without any vaginal stenosis, some women are reluctant to resume sexual relations. There may be a number of reasons for this, and sensitive enquiry and examination are required to reassure these patients.

### **Audit your work**

Surgeons should keep an accurate record and notes of all of their cases. These cases may be infrequent at first, so keeping good records is essential to build up experience.