Introduction

There is now a serious worldwide awareness of the vast number of untreated childbirth injury patients in Africa and other poor countries. The United Nations Population Fund 'End Fistula Campaign' and many other individual efforts are focusing on the prevention of fistulae through improved obstetric care. They also recognize the need to train more surgeons, especially nationals, but also overseas surgeons who are willing to provide resources and long-term commitment.

Nobody knows how many fistula patients there are who have been forgotten and are without hope. Estimates are up to two million in Africa alone. In Ethiopia, it is thought that there are 9000 new cases a year.

Fistula surgery has a justifiable reputation for being difficult, but it is not sufficiently appreciated that a significant number of cases are quite easy to cure.

Even experts cannot cure every case, however. The most experienced surgeons claim that 95% of fistulae can be closed (but they may have to operate on up to 10% a second or third time to achieve this figure). Closure of the fistula, however, does not always mean that the patient will be dry. Some 15–20% will have severe stress incontinence because the urethra and bladder have been so badly damaged. A few may improve in time, but, for those who do not, the operation has failed. Secondary operations for stress are possible, but have uncertain results. A reasonably experienced surgeon who takes on almost all the cases seen can at best probably only make 65–75% really dry.

Of course, the surgeon who turns down the difficult cases will have much better results. This explains the paradox that the better one is at repairing fistulae, the worse will be the results, because the expert rarely turns anyone away.

Anyone who watches a master fistula surgeon at work will marvel at the ease with which he or she demonstrates the art of fistula surgery. Even experienced surgeons who come new to fistula surgery will be surprised at how demanding the operations are and how difficult they seem at the start. The distorted anatomy and rigidity of tissues come as a shock. One not only has to know what must be done but also have the skill to do it. Accurate suturing in a confined space is difficult and requires more than average manual dexterity. There is a long learning curve owing to the complexity of many cases, and experience can only be gained by hands-on work. At present, the very few training opportunities are over-subscribed. The books available to help apprentice fistula surgeons are reviewed in Appendix A; these are at present either too complex for some or lacking in specific advice to provide all the help that a novice fistula surgeon requires.

There is no intention here to include a review of the literature, as this has recently been done very well,[1,2] nor can we cover every aspect of fistula surgery. We are limited by our own experience, which is constantly growing.

This book is above all intended as a user-friendly guide for those new to fistula surgery and those who are progressing up the long learning curve.

Our experiences are different in that Andrew Browning works as a full-time fistula surgeon in Ethiopia and Brian Hancock, who formerly worked as a general surgeon in Uganda, is a regular visiting surgeon to hospitals in East and West Africa.

Both of us have had the privilege of working in the well-provided environments of the Addis Ababa Fistula Hospital in Ethiopia and the Mercy Ships in West Africa. We have, however, both worked on a regular short-term basis in many mission or government hospitals that can provide only the basic facilities for fistula care. We therefore believe in a flexible approach that can be adapted to local circumstances where availability of materials and facilities varies widely. Our recommendations are largely directed to those working with restricted resources.

Teaching fistula surgery has been a large component of our work. It is rare for us to operate without at least one serious trainee present. Having helped many surgeons perform their first fistula operations, we can see the difficulties that they encounter and we understand the advice that they need. Some of our operations have been performed in hospitals that have had no prior experience of fistula surgery, and this is no bar to success.

While the text of this book is based on our own practical experience of what works best for us, we have been fortunate to visit or meet most of the small band of very experienced fistula surgeons in the world. We are most grateful for all that we have learnt from them, and many of their words of wisdom are incorporated in our advice.

There is little evidence-based research to guide a fistula surgeon, and many experts have evolved their own way of doing things in relative isolation. This is confusing for the trainee, and we cannot possibly give definitive advice, but we have tried to provide a balanced approach where possible.

There is no absolutely right way of repairing fistulae – there may be several routes to success, as long as general principles are followed.

It is important to appreciate that fistula surgery is constantly evolving as new evidence becomes available. Who would have predicted that the fat graft that for decades has been accepted as a vital component in fistula repair in the Addis Ababa Fistula Hospital would now be rarely used by many surgeons?

We expect that many of the views expressed in this book will be challenged and changed over time. Only the basic principles should stay the same. There is currently much more communication between fistula surgeons, and we expect to see considerable advances in our understanding and management of the complex issues in the near future.

The complexity of cases varies enormously: 25% are reasonably simple, 50% present a variety of technical challenges and the final 25% can be extremely challenging to cure.

Specialized centres are few and far between, and it is unrealistic to expect that fistulae should only be repaired at these centres. However, the complex cases should certainly be referred to established centres if possible.

We know of many instances where excellent work is being done in both independent and government hospitals by interested national, expatriate or regular visiting surgeons, provided that they recognize their limitations and do not attempt cases beyond their capability.

Nursing care is just as important as the surgery, and we show how care can be simplified and adapted to local circumstances. It is the surgeon's responsibility to be familiar with and to supervise all aspects of pre- and postoperative care.

We cannot over-emphasize that a fistula patient has more than just a hole in the bladder. The whole person is damaged by the disastrous outcome of obstructed labour. A full understanding of what the patient has suffered, her social background and her future are just as important to healing as the surgery.

In this book, we concentrate on the physical aspects of management, as no amount of empathy with the patient is of use unless they can be relieved of their constant incontinence as a first step. For an account of the holistic approach to the fistula patient, the reader is referred to the recent WHO manual described in Appendix A.

References

1. Wall LL, Arrowsmith SD, Briggs ND, Browning A, Lassey A. The obstetric vesico-vaginal fistula in the developing world. *Obstet Gynaecol Surv* 2005; **60**(suppl 1): S3–51.
2. Zheng AX, Anderson FWJ. Obstetric fistula in low-income countries. *Int J Gynecol Obstet* 2008; Nov 21 (Epub ahead of print).