2.1 Introduction

Although only a limited number of surgical procedures to treat anal fissure have been described in the literature, many surgical procedures are available to treat hemorrhoids. We know that there are also many possible complications of hemorrhoid surgery. Early complications include hemorrhage; somewhat later there may be abscess formation, and over the long-term incontinence (Hall and Goldberg, 2003).

I think it is best to first cover the most commonly performed operations. According to the Annual Report of the Italian Society of Colo-Rectal Surgery (Società Italiana di Chirurgia Colo-Rettale, SICCR), published in Techniques in Coloproctology by Occelli and Bruni, there are two well-established methods (the Milligan-Morgan and the Ferguson procedures), one that is gaining in importance (transanal hemorrhoidal dearterialization/Doppler-guided hemorrhoidal artery ligation, THD/DGHAL), and another that is becoming slightly less popular (the procedure for prolapse and hemorrhoids, PPH). The complications associated with the two well-established procedures and with THD are on the whole well-known, whereas PPH/stapled hemorrhoidopexy can cause unusual problems that are sometimes severe and are therefore discussed here separately.

In comparing the problem of fissure with that of hemorrhoids, surgeons (especially in Italy) tend to forget one thing that the two conditions have in common: only rarely is surgical treatment necessary, perhaps in only one out of ten cases if not even less often. And clearly, the more we operate, the greater the risk of complications.

In this chapter, instead of making a list of complications and commenting on them, as in the previous chapter, we discuss their prevention and/or their causes during surgery. For practical purposes, we shall start with the latter.

2.2 Surgical Complications After Manual Hemorrhoidectomy (Ferguson and Milligan-Morgan Procedures): Live from the Operating Room

Let’s imagine we are at the operating table, faced with a case that is not simple: a 60-year-old multiparous woman with fourth-degree hemorrhoids, (i.e., irreducible ones) that have an external fibrotic component (Fig. 2.1). We have decided to perform a hemorrhoidectomy, which, as shown by various meta-analyses, is the most radical operation in a proctologist’s repertoire.

Fig. 2.1 Hemorrhoids with fibrotic external tissue
Before proceeding, it is necessary to insert one comment about preoperative antibiotic prophylaxis. While some excellent surgeons do not use it, it is definitely necessary in cardiopathic and immuno-depressed patients. Cases of Fournier’s gangrene after hemorrhoidectomy have been reported. Although very rare, this complication can lead to abdominoperineal resection of the rectum.

Assume that we are performing a Ferguson procedure not only because that is what I do most often, but also because Jóhansson and Påhlman (2006) reported that continence is better after a Ferguson than after a Milligan-Morgan procedure, and our patient already has deficient anal sphincters.

Does the patient’s position have an effect on the complication rate? The only difference is that if the patient is in the jack-knife position the hemorrhoids are usually “deflated” such that no blood runs into the operative field, which simplifies the work of the surgeon and the surgical team.

Before the operation begins, we must consider the preparation by the anesthetist. The patient is awake, which means that she has been given spinal anesthesia, placing her at greater risk of urinary retention after surgery. We therefore caution the anesthetist not to give the patient large volumes of intravenous fluids. (If the patient was an elderly man with prostate problems it would be essential that he receive minimal fluids). The first surgical move that we make is one that can easily cause damage, i.e., insertion of the anal retractor (as this is a Ferguson procedure and assessing the rectum is never a bad idea), since we know that the patient has weak sphincters due to her age and multiple deliveries. To avoid stretching the muscle fibers and thereby damage the continence mechanism, it is best to use an instrument that does not overly dilate and is not too wide (< 32 mm), such as a Fansler, Ferguson, or Sapimed Beak dilator (Fig. 2.2). Some surgeons prefer the 36-mm circular anal dilator (CAD) used on PPH. It should be noted that even if the patient were a young male with a narrow anus, we could damage (lacerate) the sphincter by the excessively energetic insertion of a large retractor. It is therefore essential that we choose the right instrument and perform the maneuver delicately. If a Milligan-Morgan procedure is being performed, an anal retractor is not needed.

We now make the surgical incision. If the patient is in the lithotomy position, we do not start at the anterior hemorrhoid as this will cause blood to fill the operative field. The incision, especially in the Ferguson procedure, should be sufficiently long and in a narrow V-shape, extending to the perianal skin; otherwise, after suturing, there will be unaesthetic “dog’s ears,” which will result in painful swelling. A cold scalpel is used to avoid skin burns, which could facilitate suture dehiscence and cause pain.

Next we identify the internal sphincter (obviously this is also done in the Milligan-Morgan procedure), so that we can avoid injury to it during excision of the hemorrhoidal nodules. Note: Some surgeons, when performing the Ferguson procedure, place a Kelly under the hemorrhoid and cut the tissue from above. While this is a quick method that prevents bleeding, I do not use it because it does not provide a good view of the internal sphincter proper. In fact, with the Kelly one might even inadvertently pinch the sphincter.

We are now ready to excise the nodules. This may be done with scissors, a cold scalpel or electrocautery, Ultracision (the ultrasonic scalpel), a laser (infrequently used now), or radio waves.

If we are performing a Milligan-Morgan and not a Ferguson procedure, LigaSure could certainly be