CHAPTER 4
Anterior Perineal Techniques [2]

General Introduction

Anterior approaches to the pelvic floor and anal sphincters have been developed, but remains less well-known than posterior techniques. This is surprising when one considers that it is the anterior wall of the rectum that is exposed when the pelvic floor gives way. Rectal prolapse manifests itself by an initial anterior invagination and descent of the rectal wall; mucosal prolapse is most often apparent on the anterior aspect of the lower rectum: childbirth trauma to the recto-vaginal septum and perineal body occurs in the anterior quadrant; solitary rectal ulcer and the mucosal lesions of anal abuse (sexual or otherwise) preferentially occur on the anterior aspects of the rectal lumen. The mechanical effects of stretching, tearing and compression are found most often (and to their greatest extents) on the tissues in front of the rectum and anal canal, and the anal sphincter muscles are shorter and less well-defined anteriorly than they are laterally and posteriorly (especially in female subjects). Logic would seem to dictate that we should give at least equal prominence to the development of anterior techniques for the surgical correction of ano-rectal incontinence which arises as a result of anterior rather than posterior causes. When one also considers that the nerve supply to the pelvic floor and anal muscles enters from the posterior and lateral aspects, one becomes even more surprised by the current surgical emphasis on posterior approaches for the perineal correction of ano-rectal incontinence, which must frequently sever or damage these important nerves.

If the surgeon can be satisfied by clinical assessment and investigation that the cause of incontinence resides in anterior weakness or distortion of the muscular framework of the pubo-rectalis and sphincter muscles, an anterior repair should always be considered. Common causes that fall into this category include:

1. A floppy recto-vaginal septum, often associated with an absent perineal body (clinical examples of this origin are
anterior mucosal prolapse; rectocele; and possibly solitary ulcer syndrome)

2. Weakening of the normal anatomical buttresses of the anterior rectal wall by stretching (childbirth) or organ removal (hysterectomy) (clinical examples of this aetiology include patients with complete rectal prolapse and solitary ulcer syndrome)

3. Trauma [clinical examples of this are episiotomy, surgical operations (especially for a high recto-vaginal fistula), wounding and forcible anal dilation]

Although surgical trauma is a common cause of damage to the anterior quadrant of the ano-rectum in western societies, particularly after treatment of fistulas or tumours of the vagina and lower ano-rectum, in areas of endemic tribal conflict or during more extensive international wars, explosions and bullets are the most frequent causes of perineal wounds of the ano-rectum.

Because of the nature of the causes of anterior weakness of the ano-rectum, many of these patients are young. A perineal approach to their incontinence problem spares such patients the problems of the prolonged hospital stay and subsequent convalescence which is associated with extensive abdominal operations. A perineal approach also avoids additional damage to the pelvic autonomic nerves.

All patients should have their bowels emptied prior to operation using the appropriate method. To achieve this the authors favour the use of Picolax Sachets or Clean-Prep, plus a subsequent disposable phosphate enema administered 4 hours before surgery. An elemental diet is advised over the operative period, with a small dose of Milpar (one or two tablespoons daily) given by mouth to prevent faecal bolus formation. Prophylactic antibiotics are advisable (see p. 25) to cover the operation and an indwelling self-retaining catheter is used for at least 48 hours. All perineal wounds heal best by preventing activity until the stitches are removed, and after those operations where wound closure is achieved "under tension", skin stitches should be left in situ for at least 10 days, and the patient confined to bed until sound healing is obtained. If primary healing of the wound edges does not take place, it may be many weeks before healing by granulation is finalised. All these wounds are likely to become infected, and infection is inevitable if a closed haematoma forms in the depths of the wound; for this reason the authors advocate routine use of a small suction catheter (Redivac) which is left in the wound for 24 hours having been introduced at surgery by a separate stab incision. Patients should not leave hospital before they can defaecate normally, and should have proper counselling on medications for bowel regulation and diet prior to discharge. A high roughage diet with a bran supplement, plenty of clear fluid, the regular use of a hydrophilic colloid such as Normacol or Fybogel, and in some cases planned resort to glycerin suppositories, are all invaluable aids (separately or in combination) for preventing constipation and straining after a weak ano-rectal organ has been successfully reinforced by surgery. In a few patients, aperients may be required to promote adequate rectal emptying, especially in the early weeks or months after the operation when the anal canal may appear a little "too narrow". *It is a rule that with time all perineal repairs by any route tend to become looser, and that a tight repair becomes adequate with time, but a loose repair will only become laxer and will be a failure from the beginning.*

The techniques described are those selected by the authors as representing the best methods currently available for the correction of the different causes of incontinence by an anterior approach. A covering defunctioning stoma (colostomy or ileostomy) is not used for any of these techniques.