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TRANSVAGINAL DELAYED DIRECT ANAL SPHINCTER OVERLAP REPAIR

Aims of Study

The aims of the paper are to review and describe a transvaginal method of delayed anal sphincter repair.

Methods

All women were referred with pelvic organ dysfunction and/or prolapse. During the first consultation, history was prospectively collected on a standardised comprehensive urogynaecological form. Data collected included urinary symptoms, anorectal symptoms, past obstetric, medical and surgical history.

Endoanal ultrasound and anorectal neurophysiological investigations were undertaken prior to surgery. A preoperative full bowel preparation is undertaken. Post-operatively, endoanal ultrasound and anorectal neurophysiological investigations were repeated.

The principles of surgery are to dissect out and mobilise both ends of the anal sphincter together with the excision of anterior scar tissue in the perineum. A transvaginal approach is performed in preference to a transperineal as it is often performed in conjunction with a repair of posterior vaginal wall prolapse.

The perineum is infiltrated with local anaesthesia and adrenaline. A low vaginal and introital incision is made and this incision is extended out into each ischio-rectal fossa. An anterior midline vertical incision is made through the anal sphincter defect down to the anal canal muscularis and this dissection is then carried out between internal sphincter and anal canal muscularis on both sides to approximately 3 o'clock on the patient's left and 9 o'clock on the right. This dissection is aided with a finger in the rectum to reduce the risk of inadvertent proctotomy.

The lower rectum and anal canal circumference is reduced with an imbricating suture in the muscularis. An anal sphincter overlap repair is then undertaken after scar tissue is trimmed from each ends of the sphincter muscle. A double breasted-type overlap repair is performed with three rows of delayed absorbable sutures. When overlapping the anal sphincter, care is taken not to overly tighten the anus. The perineum is then closed. Surgery is covered with prophylactic antibiotics.

Results

Twenty-five women underwent transvaginal overlapping anal sphincter repair with a mean follow up time of 11.6 months (range 6 - 32). The average age was 49 years and mean parity of 2.5. Preoperatively, all women complained of anorectal symptoms with an anorectal continence score (Pescatori) of 13.4 (range 10-20, with a score of 0 being perfect continence and 20 being total incontinence).

At 6 months followup, the anorectal continence score was 1 (range 0-3). Patient satisfaction was evaluated using a visual analogue score (0-100%). About 30% of women were recorded a score of less than 80%. Seventeen women were followed up for 12 months or more and at 12 months, the mean continence score was 4 (range 0-17). Post-operative symptom changes was worse in 1 woman, no change in another and the rest had improvement of anorectal symptoms.

Conclusions

The transvaginal approach appears to be an effective method of anal sphincter repair. Furthermore, the vaginal approach is more familiar to gynaecologists. Long-term outcomes and patient satisfaction are currently being evaluated.