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Baessler K[1], Hewson A[2], Tunn R[3], Quatawneh A[1], Maher C[1]
1. Royal Women's and Mater Hospitals, 2. Newcastle Hospital, 3. Charite, Berlin

INTRAVAGINAL SLING DISTRESS

Aims of Study

Meshes are increasingly used in the surgical management of urinary incontinence and pelvic organ prolapse. Unfortunately, few of the newer materials have been studied prospectively. Whereas the success, complication rates and the limitations of the tension-free vaginal tape (Johnson&Johnson) procedure are well described, there is little data on the efficacy and safety of the anterior and posterior intravaginal slingplasty (IVS) techniques and the inserted mesh (IVS Tunneller, Tyco Healthcare USA).[1, 2] A newer IVS multifilament polypropylene tape was introduced in 1999 to alleviate a 10% infection rate associated with the IVS-Nylon mesh.[1] No cases of rejections or infections have subsequently been reported. This report describes disconcerting complications following anterior and/or posterior intravaginal slingplasties employing the multifilament polypropylene tape.

Methods

We describe the symptoms, findings, subsequent management and outcome of 14 women, who had been referred to three centres over a 25 months time period for complications following an anterior and/or posterior intravaginal slingplasty employing the new IVS tape. The authors of this report do not perform IVS operations.

Results

The mean age was 53 years (range 38-64). Five women had an anterior IVS, five a posterior and four had both anterior and posterior IVS. Two patients had an additional graft overlay, one Pelvicol (BARD) and one Prolene (Johnson&Johnson).

Presenting pathologies: All women complained of severe pain in the bladder, vagina or rectum and dyspareunia. All nine women with a posterior IVS reported buttock/rectal pain aggravated by sitting, defaecation and sexual intercourse. Seven women had symptoms and signs consistent with infected mesh: vaginal erosions not responding to oversewing (performed elsewhere), purulent vaginal discharge and bleeding, recurrent urinary tract infections and severe pain. One woman had previously had the IVS trimmed for a perineal erosion and presented with persistent vaginal/rectal pain and clinical signs of mesh infection.

Postoperatively, the median time to commencement of symptoms was one month (range up to 12 months). Surgery to the removal of the mesh was performed after a median time of 24 months post IVS (range 12-36). The anterior IVS were removed vaginally in one woman, combined vaginally-laparoscopically in two women and combined vaginally-open-abdominally in two. All posterior IVS were removed vaginally. Sharp dissection was required in all cases due to dense fibrous tissue. The removed mesh and adjacent tissue was sent for histopathology in four women and revealed acute inflammation. Intravesical mesh and permanent sutures were present in two women. No complications occurred during the removal of the mesh. The median operating time was 60 min (range 20-125 min). Eight women required subsequent surgery for stress incontinence and pelvic organ prolapse.

Preoperative investigations included urodynamics, barium enemas, pelvic and abdominal ultrasound, intravenous pyelograms and colonoscopy as appropriate. All women had preoperative bowel preparation and prophylactic antibiotics for the sling removal.

At follow up between 6 weeks to 6 months, in all women genital pain, dyspareunia, chronic discharge and bleeding, voiding and defaecation difficulties had markedly improved or ceased.

Conclusions

We report a series of mesh infections and pain syndromes following anterior and posterior intravaginal slingplasty with the new multifilament polypropylene mesh. All necessitated removal of the mesh due to symptoms debilitating to the patients and partners quality of life. The incidence of these complications is unknown. Until further data on the safety and efficacy of the IVS procedures is available these procedures cannot be recommended.

References

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