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NHS
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Mesh sacrocolpopexy for vaginal vault prolapse

1 Guidance

1.1 Current evidence on the safety and efficacy of mesh sacrocolpopexy for vaginal vault prolapse appears adequate to support the use of this procedure provided that the normal arrangements are in place for consent, audit and clinical governance.

1.2 Clinicians should ensure women understand that there is a risk of recurrence of vaginal vault prolapse after any prolapse repair procedure, including mesh sacrocolpopexy, and that there is also a risk of complications, including vaginal erosion. Clinicians should provide women with clear written information. In addition, use of the Institute's information for patients ('Understanding NICE guidance') is recommended (available from www.nice.org.uk/IPG215publicinfo).

1.3 The procedure should only be performed by surgeons specialising in the management of pelvic organ prolapse and urinary incontinence.

1.4 Evidence on efficacy outcomes is limited to 5 years. Therefore further evidence on outcomes beyond 5 years and the efficacy of different types of mesh would be useful.

2 The procedure

2.1 Indications

2.1.1 Vaginal vault prolapse occurs in women who have previously undergone hysterectomy, when the vault of the vagina descends from its normal position. The condition occurs more commonly with increasing age and may be associated with obesity and previous childbirth or pelvic surgery.

2.1.2 Symptoms include pelvic heaviness, a dragging sensation in the vagina, a bulge, lump or protrusion coming down from the vagina, and backache.

2.1.3 Minor vaginal vault prolapse may be treated with conservative measures such as pelvic floor exercises or pessaries. More serious prolapse may require surgical repair, using either abdominal or vaginal approaches.

2.1.4 Surgical procedures include simple closure of an enterocoele sac, various techniques to fix or repair the vaginal vault, and obliteration of the vagina by colpocleisis.

2.2 Outline of the procedure

2.2.1 Mesh sacrocolpopexy is performed under general anaesthesia, using an abdominal (open or laparoscopic) approach. A mesh is attached at one end to the longitudinal ligament of the sacrum and at the other to the top of the vagina and for a variable distance down the posterior and/or anterior vaginal walls. There are several variations in the technique, specifically with regard to opening and closure of the peritoneum.

2.2.2 Sacrocolpopexy is commonly combined with other procedures such as colposuspension or suburethral sling placement, particularly for stress urinary incontinence.

2.2.3 Various mesh types have been used for this procedure; currently most are synthetic (usually polypropylene).

2.3 Efficacy

2.3.1 In a randomised controlled trial (RCT) comparing mesh sacrocolpopexy (n = 47) with vaginal sacrospinous colpopexy (n = 48), both objective (based on anatomical findings) and subjective (presence of symptoms) success rates were similar at a median follow-up of 2 years. For mesh sacrocolpopexy and vaginal sacrospinous colpopexy, the objective success rates were 76% (35/46) and 69% (29/42) respectively (p = 0.46), and the

Interventional procedure guidance 215

This guidance is written in the following context

This guidance represents the view of the Institute, which was arrived at after careful consideration of the available evidence. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. This guidance does not, however, override the individual responsibility of healthcare professionals to make appropriate decisions in the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Interventional procedures guidance is for healthcare professionals and people using the NHS in England, Wales, Scotland and Northern Ireland.

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subjective success rates 93% (43/46) and 91% (39/43) (p = 0.19). A case series study reported an objective success rate of 98% (212/217) after 3 years.

2.3.2 In a review combining data from two RCTs, recurrence rates of vault prolapse were 4% (3/84) following mesh sacrocolpopexy compared with 15% (13/85) following vaginal sacrospinous colpopexy (relative risk 0.23; 95% confidence interval [CI] 0.07 to 0.77).

2.3.3 The Specialist Advisers noted that there are some uncertainties about the laparoscopic technique, and the optimum mesh material and method of placing; and that biological mesh materials are less effective than synthetic ones in the long term.

2.4 Safety

2.4.1 Intraoperative complications of mesh sacrocolpopexy included bladder perforation in 2% (2/103) and less than 1% (1/217) of women, and rectal injury in less than 1% (1/217).

2.4.2 Postoperative complications included urge incontinence in 6% (19/325), urinary tract infection in 4% (8/217), wound infection in 3% (7/217), haematoma in 3% (7/217), ileus in 2% (5/217) and pelvic infection (1/217) and chronic pelvic pain (1/217) in less than 1% of women. Urinary retention rates ranged from less than 1% (2/235) to 9% (20/217).

2.4.3 In an RCT comparing mesh sacrocolpopexy with vaginal sacrospinous colpopexy, at mean follow-up of 22 to 24 months de novo dyspareunia and urinary incontinence were reported in 11% (2/19) and 9% (2/22) of women respectively after mesh sacrocolpopexy (p value not reported) and in 18% (3/17) and 33% (8/24) of women respectively after vaginal sacrospinous colpopexy (p = 0.09).

2.4.4 In another RCT women without symptoms of stress urinary incontinence were treated with mesh sacrocolpopexy alone (n = 152) or combined with Burch colposuspension (n = 147). After 3 months, 44% (67/152) and 24% (35/147) respectively met one or more stress incontinence criteria (p < 0.001).

2.4.5 Mesh erosion rates in three studies with mean follow-up of at least 15 months were 1% (3/325), 8% (7/91) and 9% (9/103). The last study reported that erosion was more likely if the mesh was inserted vaginally.

2.4.6 The Specialist Advisers listed potential adverse events as mesh erosion, mesh infection, bowel obstruction, bowel and bladder perforation, and bleeding.

2.5 Other comments

2.5.1 It was noted that a variety of mesh types are available and that outcomes may vary according to the type of mesh used: publication of comparative long-term outcomes and complication rates will be particularly useful.

3 Further information

3.1 The Review Body for Interventional Procedures has been commissioned to prepare a systematic review of the different interventional procedures for pelvic organ prolapse.

Andrew Dillon
Chief Executive
March 2007

Information for patients

The Institute has produced information describing its guidance on this procedure for patients and their carers ('Understanding NICE guidance'). It explains the nature of the procedure and the decision made, and has been written with patient consent in mind. This information is available from www.nice.org.uk/IPG215publicinfo

Sources of evidence

The evidence considered by the Interventional Procedures Advisory Committee is described in the following document.

'Interventional procedure overview of mesh sacrocolpopexy for vaginal vault prolapse', August 2006.

Available from: www.nice.org.uk/IP311overview

Ordering information
Copies of this guidance can be obtained from the NHS Response Line by telephoning 0870 1555 455 and quoting reference number N1226. 'Understanding NICE guidance' can be obtained by quoting reference number N1227.

The distribution list for this guidance is available at www.nice.org.uk/IPG215distributionlist

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