

VAGINAL PROLAPSE SURGERY WITH SYNTHETIC MESH AUGMENTATION IN THE UK: ANALYSIS OF THE BRITISH SOCIETY OF UROGYNAECOLOGISTS' (BSUG) DATABASE

Hypothesis / aims of study

Evidence suggests that surgical repair of vaginal wall prolapse using mesh may be more efficacious than traditional surgical repair. However, the data on efficacy and safety are limited. The UK's National Institute for Health and Clinical Excellence (NICE) has recommended that vaginal prolapse surgery with mesh augmentation, as a new intervention, should only be performed as part of clinical audit.(1)

The British Society of Urogynaecologists' (BSUG) database is an electronic audit tool available to all UK consultants undertaking urogynaecological procedures. The aim of our study was to assess the use of mesh augmentation in the UK and the use of the BSUG database as a national audit of mesh augmentation procedures.

Study design, materials and methods

Operations were analysed according to the vaginal compartment repaired, the type of the mesh kit used, the type of operation (whether primary or repeat prolapse repair) and complications reported.

The numbers of vaginal prolapse repair procedures using synthetic meshes entered onto the BSUG database were also compared with the numbers of mesh kits sold in the UK.

Results

The BSUG database has 68 active centres in the UK, each entering their episodes of surgery. From January 2007 to January 2010 8,230 prolapse operations had been entered, of these 613 (7.4%) were vaginal prolapse procedures with mesh augmentation: 321 (52.4%) had a posterior compartment repair, 240 (39.1%) had an anterior compartment repair and 52 (8.5%) were total vaginal mesh repairs. 394 (65%) were repeat prolapse repair operations and 219 (35%) were primary procedures. The most commonly used mesh kit was the Gynecare Prolift, which was employed in 265 out of 613 (43.2%) mesh augmentation procedures. Of 1197 Prolift mesh kits sold in the UK in 2009 122 (10.2%) were entered on the BSUG national audit database.

Complications reported on 613 procedures entered on the BSUG database were:

Intraoperative complications:

Intraoperative complication	Number, n	%	Missing data n, (%)
Ureteric injury	1	0.2	5, (1.1%)
Bladder injury	3	0.5	5, (1.1%)
Bowel injury	1	0.2	5, (1.1%)
Vascular injury	2	0.3	5, (1.1%)
Neurological injury	0	0	5, (1.1%)
Blood loss ≥500ml	14	2.3	6, (1.1%)
Blood transfusion	6	1.0	6, (1.0%)

Immediate postoperative complications:

Immediate postoperative	Number, n	%	Missing data n, (%)
Thromboembolism	2	0.6	271, (44.2%)
Return to theatre	1	0.4	356, (57.8%)
Catheterisation required >10 days	5	2.0	358, (58.0%)
Return to hospital	16	6.7	358, (58.0%)

Postoperative complications at 3 months follow up:

Postoperative complications	Number, n	%	Missing data n, (%)
Mesh erosion (extrusion)	24	10.0	358, (58.0%)
Graft infection	0	0	358, (58.0%)
<i>De novo</i> dyspareunia	5	2.0	356, (57.8%)
Vaginal narrowing	0	0	358, (58.0%)
<i>De novo</i> urinary incontinence	0	0	360, (60.0%)

Long term complications were not entered on the database.

Interpretation of results

The use of synthetic mesh in prolapse surgery in the UK is still relatively uncommon, being employed in only 7.4% of all surgical operations for vaginal prolapse. Augmentation with mesh is mostly employed for repair of the posterior compartment.

Industry sales data suggests that currently only a small proportion of the vaginal mesh prolapse repair procedures carried out in the UK is entered on the BSUG national database. For those procedures that are recorded, there is a high level of missing follow-up data, and long-term follow-up data is not reported at all. The level of intraoperative and postoperative complications recorded on the database is generally lower than that reported in the literature, which may reflect the reliability of self reporting.

Concluding message

The majority of vaginal prolapse surgery with synthetic mesh augmentation conducted in the UK is not entered on the BSUG national audit database. The current level of participation in UK national audit of these new interventional procedures is generally poor, in spite of NICE recommendations.

References

1. Surgical repair of vaginal wall prolapse using mesh. June 2008. www.nice.org.uk

<i>Specify source of funding or grant</i>	None
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	The study was a clinical audit and therefore did not require ethics approval
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes