

PRIMARY & REDO ANTERIOR REPAIR SURGERY IN UK- AN ANALYSIS OF THE 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, with limited data on efficacy and safety. The UK's National Institute for Health and Clinical Excellence (NICE)¹ has recommended that vaginal prolapse surgery with mesh augmentation should only be performed as part of clinical audit. Currently the use of implants both biological and synthetic in reconstructive pelvic surgery is expanding rapidly in spite of a paucity of data supporting their use.

Study design, materials and methods

The British Society of Urogynaecologists (BSUG) database is an electronic audit tool available to all UK consultants undertaking urogynaecological procedures. By January 2010 there were 142 centres registered to use the database, of which 68 had entered data on 14,877 episodes of prolapse surgery. The demographic details, pre-operative assessment (Ba & C on POP-Q), number of procedures using grafts, variety of grafts, grade of surgeon, complications & outcome in primary and redo anterior repair were compared.

Results

Between January 2009 to December 2009, 938 cases of anterior repair were reported. Of these 620 were primary, 243 were redo and 75 were unspecified with regards to primary or redo hence excluded from the analysis.

Interpretation of results

In our analysis, grafts were employed in 4.6% cases in primary repair vs. 51% in redo group. The most commonly used mesh kit was Gynecare Prolift in both groups. Of the primary procedures 64% were performed by a consultant, 23.8% by ST trainee, 7.4% by sub-specialty trainee (SST) and in 2.9% cases the grade of surgeon was unanswered. In the redo group 75.6% cases were performed by a consultant, 10.5% by ST trainee, 9.9% by SST & 0.8% were unanswered. The demographic details including age and average degree of anterior vaginal wall prolapse were very similar in both groups. The complication rates were low overall with no significant difference between the two groups apart from more number of cases in the primary group requiring a catheter for more than 10 days and having to return to hospital within 30 days of operation. A more significant improvement was found in point Ba in the primary group compared to the redo group with not much difference in point C.

Concluding message

Follow-up was missing in over 50% cases. In the primary group the post-operative follow-up questionnaires were completed in 41% & in 39% in the redo group. In both groups post-operative POP-Q was not performed in over 80% cases. Over 90% reported an improved global impression of outcome of prolapse in both groups. More specialty trainees need to perform primary repairs to increase surgical experience. Basic trends in primary prolapse surgery remain unchanged. The increase in the use of mesh & associated graft problems is in patients with re-do repair.

TABLE 1

Demographic details	Primary procedures (P)	Re-do procedures (R)	Missing data
Age(years) Mean	62.97	63.74	P n= 16, 2.58% R n= 5, 2.05%
POP-Q C Mean	-3.980	-4.31	P 316(50.9%) R 138(56.7%)
POP-Q Ba Mean	0.706	0.698	P 293(47.3%) R 117(48.1%)

TABLE 2

Primary		Re-do	
Without graft n=591	With graft n=29	Without Graft n=119	With graft n=124
95.3%	4.67% Avaulta 5(17.3%)	48.9%	51% Avaulta 14(6.25%)

Prolift 13(44.8%) Pinnacle 1(3.4%) Perigee 2(6.89%) Graft unspecified 7(24%) TOAR other 1(3.4%)		Prolift 42(33.8%) Pinnacle 0(0%) Perigee 22(17.7%) Pelvicol 1(0.8%) Graft unspecified 45(36.29%)
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TABLE 3

Complications	Primary anterior repair (P)	Re-do anterior repair (R)
Ureteric injury	0%	0.4%
Bladder injury	0.2%	1.2%
Bowel injury	0%	0%
Vascular injury	0%	0%
Neurological injury	0%	0%
Blood loss >500mls	0.3%	1.2%
Peri-operative blood transfusion	0.1%	0%
Peri-operative thromboembolism	0%	0%
Death	0%	0%
Return to theatre within 72hrs	0.3%	0%
Catheter >10 days post-op	1.1%	1.2%
Return to hospital within 30 days of operation	1.45%	0.8%
Graft problems	0.48%	3.7%
Does patient require long-term catheters	0%	unanswered

TABLE 4

Global Impression of Outcome of prolapse	Primary Anterior Repair (P)	Re-do Anterior Repair (R)	Missing data (P), (R)
Improved	96.8%	95.7%	59%, 60.9%
No change	2.75%	2.1%	
Worse	0.39%	1%	
POP-Q	Primary Anterior Repair	Re-do Anterior Repair	Missing data (P), (R)
Point Ba	Mean = -2.17	Mean= -0.645	P=86% R=81.9%
Point C	Mean= -4.6	Mean= -5.35	P=86.5% R=84%

References

1. NICE Guideline- Surgical repair of vaginal wall prolapse using mesh

Specify source of funding or grant	Worcester Royal Hospital, UK & BSUG database
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require ethics committee approval because	As this is a national database where patient data is entered after their written consent we did not require an ethics committee approval.
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes