

## A COMPARISON OF VAGINAL SACROSPINOUS FIXATION AND ABDOMINAL SACROCOLPOPEXY FOR VAGINAL VAULT PROLAPSE REPAIR IN THE UK: AN ANALYSIS OF THE BRITISH SOCIETY OF UROGYNAECOLOGISTS' (BSUG) DATABASE

### Hypothesis / aims of study

The aim of this study was to identify which vault suspension procedure is most commonly employed for vaginal vault prolapse repair in the UK and determine the factors influencing choice of procedure.

Vaginal vault prolapse has been estimated to occur in up to 43% of post-hysterectomy patients. Abdominal sacrocolpopexy is well described in the literature, with a reported success rate in the range 78-100%. When compared with sacrospinous fixation, abdominal sacrocolpopexy has been shown to have a lower rate of recurrent vaginal prolapse, less postoperative dyspareunia and a lower reoperation rate; however, when performed by laparotomy there is a longer recovery time(1,2).

### Study design, materials and methods

The BSUG database is an audit tool available to UK consultants undertaking urogynaecological procedures. By January 2010 there were 142 centres registered to use the database, of which 68 had entered data on 14,977 episodes of surgery. The demographic details (age, BMI, previous prolapse surgery), preoperative assessments (point C on POP-Q) and perioperative complications of patients undergoing the vaginal sacrospinous vault fixation and abdominal sacrocolpopexy (open and laparoscopic) were compared.

### Results

Between January 2007 and January 2010, 574 sacrospinous vault fixations (SSF) and 316 abdominal sacrocolpopexies (SCP) were reported (ratio 1.8:1). 34 (10.1%) of these sacrocolpopexies were performed laparoscopically.

Table 1: Demographic details

Demographic details	SSF	SCP
Age(years): mean age; (SD) range	65.1;(10.7) 36 to 89	63.1;( 9.2) 37 to 83
Body mass index(kg/m <sup>2</sup> ): mean BMI; (SD) range	27.9;(4.62) 18.7 to 43.6	27.3;(4.86) 18.4 to 47.0
POP-Q C: mean; (SD) range	+ 0.1;(3.9) -8 to +10	+1.0;(3.1) -5 to +10

Table 2. Previous prolapse surgery

Previous surgery	SSF(%)	SCP(%)	SSF:SCP	p-values
Vaginal hysterectomy	5	9	.81	n.s.
Anterior repair	2	9	.02	n.s.
Posterior colporrhaphy +/-perineorrhaphy	6	7	.44	<0.0001
Sacrospinous fixation			.12	0.0001
Sacrocolpopexy		6	.09	<0.0001

The perioperative complications were rare, with ureteric, bladder, bowel and vascular injuries reported in 0.5% or less of cases. Blood loss of more than 500 mls was reported in 0.9% of the SSF group and 1.2% of the SCP group.

### Interpretation of results

Almost twice as many vault prolapse repair procedures were performed vaginally by sacrospinous fixation than abdominally by sacrocolpopexy. Only a small proportion of the sacrocolpopexies was performed laparoscopically, perhaps reflecting the general lack of laparoscopic skills among surgeons performing prolapse repair procedures.

The demographic characteristics (age, BMI, previous prolapse surgery) and average degree of vault prolapse were similar for both groups of patients. Surgeons were more likely to choose the abdominal route in patients with previous failed vault surgery.

### Concluding message

These results show that vaginal sacrospinous fixation is chosen preferentially by UK surgeons for primary vault prolapse repair and sacrocolpopexy is the preferred option in patients with previous failed vault surgery. The preference for sacrocolpopexy in failed cases is consistent with previous findings of the lower prolapse recurrence rate(1,2).

The primary choice of vault suspension procedure is not due to the differences in patient demographics and may be due to less morbidity and quicker recovery associated with sacrospinous fixation compared with open abdominal sacrocolpopex(1), particularly as the laparoscopic approach is not widely available

### References

1. 1. Maher CF, Qatawneh AM., Dwyer PL. Abdominal sacrocolpopexy or vaginal sacrospinous colpopexy for vaginal vault prolapse: A prospective randomized study. Am J Obstet Gynecol 2004;190:20-26.
2. 2. Maher C, Baessler K, Glazener CMA, Adams EJ, Hagen S. (2007). Surgical management of pelvic organ prolapse in women. Cochrane Database of Systematic Reviews, Issue 3.

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<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>No</b>
<b><i>This study did not require ethics committee approval because</i></b>	<b>The study is a part on national clinical audit</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>