



BRITISH SOCIETY OF UROGYNAECOLOGY (BSUG)

POSTERIOR VAGINAL WALL REPAIRS IN THE UK 2018 TO 2023

2ND NATIONAL REPORT

BSUG AUDIT AND DATABASE COMMITTEE 2025

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CHAPTER 1: Introduction

1.1 BSUG DATABASE

The British Society of Urogynaecology (BSUG) database was established in 2004 and launched online in 2007. It collects data on operations for urinary incontinence and pelvic organ prolapse from the UK and is open to BSUG members. Access to the database is password-protected and the database is held within the secure NHS N3 network.

Data entry is self-reported and voluntary but is recommended by NICE and is currently required for a centre to be accredited in urogynaecology by BSUG. Patient consent is required for data entry.

1.2 DATABASE USAGE

From 2008 to 2017, 68961 (compared to 116 037 in the previous 5 years) procedures for urinary incontinence and prolapse were entered onto the database. There were 139 centres which entered data and these included teaching hospitals, district general hospitals and private hospitals. The cases entered also include operations carried out by trainees on patients under the care of consultants. These cases are included in the audit as they cannot be easily separated.

1.3 AUDIT TIMEFRAME AND OPERATIONS INCLUDED

The timeframe of the audit was from the start of 2018 to the end of 2023. Only sole anterior vaginal repairs without concomitant procedures were analysed. Repairs with mesh were excluded. Anterior vaginal repairs carried out in conjunction with vaginal hysterectomies, vault suspension procedures and continence procedures were included in datasets that have been analysed and reported in other BSUG National Reports on incontinence and prolapse surgery.

1.4 OUTCOMES

1.4.1 FOLLOW-UP INTERVAL AFTER SURGERY

The database records the 1st follow-up after surgery at 4 prespecified intervals of 6 weeks, 3 months, 6 months and 1 year. How the follow-up was carried out can also be recorded (*Table 1*).

Outpatient visit
Postal questionnaire
Online questionnaire
Telephone follow-up
Follow-up at the GP practice
As per local agreement

Table 1: *Method of follow-up.*

1.4.2 GLOBAL IMPRESSION OF IMPROVEMENT (GII) AFTER SURGERY

The outcome of surgery was assessed by looking at the patient-reported global impression of improvement (GII). The scale has 7 outcome categories and is specific to an improvement in prolapse (*Table 2*).

Very much better
Much better
A little better
No change
A little worse
Much worse
Very much worse

Table 2: *Global impression of improvement after surgery.*

1.4.3 SURGICAL COMPLICATIONS

The database records prespecified intraoperative and postoperative complications (Table 3 & 4).

Ureteric injury
Bladder injury
Bowel injury
Urethral injury
Nerve injury
Estimated blood loss > 500 ml

Table 3: *Intraoperative complications.*

Graft complications (where relevant)
Blood transfusion
Thromboembolism
Return to theatre within 72 hours of the procedure
Catheterisation > 10 days
Readmission within 30 days of the procedure
Death

Table 4: *Postoperative complications.*

1.4.4 ASSIGNMENT OF RISK FOR COMPLICATIONS

The incidence of each intraoperative and postoperative complication was assigned a level of risk based on guidance by the Royal College of Obstetricians and Gynaecologists [2] (Table 5).

Term Equivalent numerical ratio Colloquial equivalent

Very common	1/1 to 1/10	A person in a family
Common	1/10 to 1/100	A person in a street
Uncommon	1/100 to 1/1000	A person in a village
Rare	1/1000 to 1/10 000	A person in a small town
Very rare	Less than 1/10 000	A person in a large town

Table 5: *Assignment of risk for complications.*

CHAPTER 2: Number of procedures and trends

2.1 NUMBER OF PROCEDURES 2018-2023

There were 2682 (compared to 9234 in the previous 5 years) posterior vaginal repairs.

Table 6 shows the number of posterior repairs per year.

Year	Number
2018	678
2019	655
2020	266
2021	294
2022	358
2023	431

Of course the years 2020-2022 were impacted by the Covid pandemic resulting in a significantly lower overall number than in the last report.

2.2 TRENDS 2018-2023

It is hard to look at the trends in the number of procedures due to the significant impact of the Covid pandemic. The numbers during the pandemic are similar to the years 2008-2010.

Posterior repair	
2008	281
2009	518
2010	663
2011	695
2012	790
2013	1045
2014	1294
2015	1372
2016	1307
2017	1269
2018	1551

Table 6: Number of posterior vaginal repair procedures added to the BSUG database per year 2008-2018.

CHAPTER 3: Primary and repeat operations for prolapse

3.1 SURGERY FOR RECURRENT PROLAPSE

82.1% of posterior repairs were primary procedures, see *table 7*.

Unanswered	279
Primary	1974
Redo - Not Specified	29
Repeat - Same site	153
Repeat - New site	247
Total	2682

Table 7: *Posterior vaginal repair: Primary and repeat procedures for prolapse.*

CHAPTER 4: Follow-up after surgery

4.1 FOLLOW-UP METHOD

Prespecified methods of follow-up can be recorded in the database (*Table 8*). 1580 (58.9%) of posterior repairs had the follow-up method recorded. Of these, 1195 (75.6%) were followed-up in clinic. There was a marked increase in the use of telephone follow up during the years 2019-2021.

Unanswered	1103
Outpatient visit	1195
Postal questionnaire	67
Online	3
Telephone response	300
GP Practice	1
As per local agreement	13
Total	2683

Table 8: Posterior vaginal repair: Method of follow-up.

4.2 FOLLOW-UP INTERVAL AFTER SURGERY

The database records the interval to the 1st follow-up after surgery at 4 prespecified intervals; 6 weeks, 3 months, 6 months and 1 year (*Table 9*).

1553 (57.9%) of posterior repairs had the 1st follow-up interval recorded. The 1st follow-up occurred most frequently at 3 months (46.4%).

Unanswered	1129
6 Weeks	339
3 Months	720
6 Months	396
12 Months	98
Total	2682

Table 9: Anterior vaginal repair: Follow-up interval after surgery.

CHAPTER 5: Global impression of improvement (GII) after surgery

The efficacy of surgery was assessed using patient-reported global impression of improvement (GII).

5.1 GII AT 1ST FOLLOW-UP

GII at the 1st follow-up was recorded in 56.2% (1507) episodes (*Table 10*). Overall, 87.6% (1321) episodes were Very Much Better or Much Better after posterior repairs.

Unanswered	1175
Very much worse	4
Much worse	7
A little worse	8
No change	49
A little better	116
Much better	409
Very much better	912
N/A	2
Total	2682

Table 10: Posterior repair *GII at 1st follow-up.*

CHAPTER 6: Complications of surgery

6.1 INTRAOPERATIVE COMPLICATIONS

The most common intraoperative complications for posterior repair procedures were vaginal button- holing (0.001%) and blood loss >500ml (0.001%) (*Table 12*).

Graft complication	Unanswered	1920
	No	762
	Yes	0
Ureteric injury	Unanswered	59
	No	2623
	Yes	0
Bladder injury	Unanswered	59
	No	2623
	Yes	0
Vaginal Button-Holing	Unanswered	62
	No	2616
	Yes	2
Urethral Injury	Unanswered	62
	No	2618
	Yes	0
Bowel Injury	Unanswered	81
	No	3889
	Yes	0
Neurological Injury	Unanswered	59
	No	2623
	Yes	0
Blood Loss >500mls	Unanswered	59
	No	2620
	Yes	3
Peri-operative blood transfusion	Unanswered	59
	No	2623
	Yes	1
Peri-operative Thromboembolism	Unanswered	59
	No	2623
	Yes	0
Death	Unanswered	59
	No	2623
	Yes	0

Table 12: Posterior repair intraoperative complications.

6.2 POSTOPERATIVE COMPLICATIONS

The most common postoperative complications for posterior repair was return to hospital within 30 days of the procedure for an elective or emergency procedure related event (2.1%) (Table 13).

Graft Complication	Unanswered	2365
	No	317
	Yes	0
Return to theatre for procedure-related event within 72 hrs	Unanswered	1016
	No	1664
	Yes	8
Catheterisation required for more than 10 days post-op	Unanswered	1016
	No	1663
	Yes	9
Return to hospital within 30 days for procedure related event	Unanswered	1016
	No	1611
	Yes Elective	21
	Yes Emergency	34
Readmitted to hospital within 30 days for procedure related event	Unanswered	1016
	No	1657
	Yes - Elective	0
	Yes - Emergency	9

Table 13: Posterior repair postoperative complications.

CHAPTER 7: Limitations of the audit

Not every posterior vaginal repair over the last 10 years has been included in this analysis as use of the database is voluntary and open only to BSUG members. Some procedures will have been performed by Consultants who are not members of BSUG. A comparison to Hospital Episode Statistics (HES) has not been made. In addition, caution must be applied to the use and interpretation of this report because of missing data and the limited recording of long-term outcomes – both positive and negative. This is particularly so for long-term complications which may arise after the initial period of follow-up and which may have been treated in other units.