BRITISH SOCIETY OF UROGYNAECOLOGY (BSUG)

ANTERIOR VAGINAL WALL REPAIRS IN THE UK 2018 TO 2023

2ND NATIONAL REPORT

BSUG AUDIT AND DATABASE COMMITTEE 2025

BSUG Audit Database 2025
Registered charity No 1143157

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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 3972 (compared to 7727 in the previous 5 years) anterior vaginal repairs.

Table 6 shows the number of anterior repairs per year.

Year	Number
2018	1034
2019	957
2020	442
2021	399
2022	520
2023	618

Of course the years 2020-2022 were impacted by the Covid pandemic.

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.

Anterior repair	
2008	255
2009	442
2010	444
2011	520
2012	694
2013	833
2014	1114
2015	1169
2016	1150
2017	1106

Table 6: *Number of anterior 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 PROLAPSES

65.3% of anterior repairs were primary procedures, see *table 7*.

Unanswered	428
Primary	2592
Redo - Not Specified	46
Repeat - Same site	575
Repeat - New site	329
Total	**3970**

Table 7: *Anterior 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)*. 2372 (59.7%) of anterior repairs had the follow-up method recorded. Of these, 1872 (78.9%) were followed-up in clinic. There was a marked increase in the use of telephone follow up during the years 2019-2021.

Unanswered	1598
Outpatient visit	1872
Postal questionnaire	15
Online	4
Telephone response	452
GP Practice	2
As per local agreement	27
Total	**3970**

Table 8: *Anterior 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)*.

2338 (58.9%) of anterior repairs had the 1st follow-up interval recorded. The 1st follow-up occurred most frequently at 3 months (46.3%).

Unanswered	1632
6 Weeks	536
3 Months	1083
6 Months	534
12 Months	185
Total	**3970**

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 56.4% (2239) episodes *(Table 10)*. Overall, 87.4% (1958) episodes were Very Much Better or Much Better after anterior repairs.

Unanswered	1724
Very much worse	4
Much worse	13
A little worse	14
No change	85
A little better	165
Much better	623
Very much better	1335
N/A	7
Total	**3970**

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

6.1 INTRAOPERATIVE COMPLICATIONS

The most common intraoperative complications for anterior repair procedures were bladder injury (0.001%) and vaginal button- holing (0.001%) *(Table 12)*.

Graft complication	Unanswered	2852
	No	1117
	Yes	1
Ureteric injury	Unanswered	81
	No	3889
	Yes	0
Bladder injury	Unanswered	81
	No	3889
	Yes	3
Vaginal Button-Holing	Unanswered	87
	No	3883
	Yes	3
Urethral Injury	Unanswered	84
	No	3886
	Yes	0
Bowel Injury	Unanswered	81
	No	3889
	Yes	0
Neurological Injury	Unanswered	81
	No	3889
	Yes	0
Blood Loss >500mls	Unanswered	81
	No	3887
	Yes	2
Peri-operative blood transfusion	Unanswered	81
	No	3888
	Yes	1
Peri-operative Thromboembolism	Unanswered	84
	No	3886
	Yes	0
Death	Unanswered	81
	No	3889
	Yes	0

Table 12: *Anterior repair intraoperative complications.*

6.2 POSTOPERATIVE COMPLICATIONS

The most common postoperative complications for anterior repair were return to hospital within 30 days of the procedure (3.1%) and catheterisation for > 10 days (1.5%) *(Table 13)*.

Graft Complication	Unanswered	3510
	No	460
	Yes	0
Return to theatre for procedure-related event within 72 hrs	Unanswered	1457
	No	2510
	Yes	3
Catheterisation required for more than 10 days post-op	Unanswered	1462
	No	2471
	Yes	37
Return to hospital within 30 days for procedure related event	Unanswered	1475
	No	2418
	Yes Elective	50
	Yes Emergency	27
Readmitted to hospital within 30 days for procedure related event	Unanswered	1478
	No	2484
	Yes - Elective	5
	Yes - Emergency	3

Table 13: *Anterior repair postoperative complications.*

CHAPTER 7: Limitations of the audit

Not every anterior 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.