



BRITISH SOCIETY OF
UROGYNAECOLOGY (BSUG)

**VAGINAL VAULT SUSPENSION SURGERY
IN THE UK 2008-2017**

SACROSPINOUS FIXATION

BSUG AUDIT AND DATABASE COMMITTEE 2019

Contents

PREFACE		4
CHAPTER 1	Introduction	5
	1.1 BSUG database	
	1.2 Database usage	
	1.3 Audit timeframe and operations included	
	1.4 Outcomes	
	1.4.1 Follow up interval after surgery	
	1.4.2 Global impression of improvement (GII) after surgery	
	1.4.3 Surgical complications	
	1.4.4 Assignment of risk for complications	
CHAPTER 2	Number of procedures and trends	9
	2.1 Number of procedures 2008-2017	
	2.2 Trends 2008-2018	
CHAPTER 3	Sole and concomitant procedures	11
CHAPTER 4	Primary and repeat operations for prolapse	13
	4.1 Surgery or recurrent prolapse	
CHAPTER 5	Follow-up after surgery	14
	5.1 Follow-up method	
	5.2 Follow-up interval after surgery	
CHAPTER 6	Global impression of improvement (GII) after surgery	16
	6.1 GII at first follow-up	
	6.2 GII at different time intervals	
CHAPTER 7	Complications of surgery	18
	7.1 Intraoperative complications	
	7.2 Postoperative complications	
CHAPTER 8	Limitations of the Audit	23

ABBREVIATIONS

British Society of Urogynaecology (BSUG)

National Institute for Health and Care Excellence (NICE)

National Health Service (NHS)

Sacrospinous fixation (SSF)

Sacrospinous colpopexy (SSC)

Sacrospinous hysteropexy (SSH)

Global impression of improvement (GII)

Hospital Episode Statistics (HES)

Royal College of Obstetricians and Gynaecologists (RCOG)

Preface

The British Society of Urogynaecology (BSUG) database has been available online since 2007. It allows BSUG members to record details of procedures performed to treat urinary incontinence and pelvic organ prolapse. Although voluntary, use of the database is recommended by The National Institute for Health and Care Excellence (NICE). In addition, since July 2018, its use is required for 'high vigilance restriction' procedures [1].

The main aim of the BSUG database is to allow outcomes of individual operations to be studied in detail. Thanks to the commitment of BSUG members - and the patients who kindly allowed their data to be recorded – the database has been extremely successful. Currently more than 140 000 individual surgical episodes have been recorded by many consultants and centres. There have also been many publications which are listed on the BSUG website.

Individual consultants use the BSUG database to examine their own practice and for annual appraisal. It is also one of the requirements to become a BSUG accredited urogynaecology centre.

Continual improvements have been made to the BSUG database by many consultants who have worked in their own time without payment. While not perfect, the large number of cases entered by many consultants allows a valid assessment of the outcome of prolapse and incontinence procedures in the UK to be made.

This is the first National Report on Sacrospinous Fixation from the BSUG Audit and Database Committee and includes the first full 10 years of data collection (2008 – 2017). We have included information on national trends and details on both sacrospinous colpopexy and sacrospinous hysteropexy. A conscious decision was taken to not interpret or comment on the results apart from where an explanation is necessary.

Thank you again to the patients and BSUG members who have contributed to this report which we hope you will find useful.

BSUG Audit and Database Committee 2019

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, 116 037 procedures for urinary incontinence and prolapse were entered onto the database. There were 145 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 2008 (the first full year of online data collection) to the end of 2017. We have also shown the number of procedures undertaken in 2018 but have not analysed their outcomes because at the time of writing this report many patients had not completed their follow up.

The 2 sacrospinous fixation (SSF) operations included in this audit are:

1. Sacrospinous colpopexy (SSC)
2. Sacrospinous hysteropexy (SSH)

These operations could be sole procedures or part of a combination of procedures, usually for pelvic organ prolapse but sometimes also for incontinence. Sole procedures cannot automatically be separated from procedures with concomitant operations using the current functions of the database. The data was analysed manually to categorise the procedures.

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*).

Table 1: *Method of follow-up.*

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

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*). SSF operations may have been carried out along with other concomitant procedures that may have a confounding effect on GII. Therefore, GII for both sole procedures and procedures with concomitant operations are reported separately. As the functions of the database only generate the overall GII automatically, data was analysed manually to obtain this information.

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

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

1.4.3 SURGICAL COMPLICATIONS

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

Table 3: *Intraoperative complications.*

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

Table 4: *Postoperative 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

It is important to note that SSF procedures may have been carried out along with other concomitant operations which may have a confounding effect on the complication rate. Therefore, the rate for both sole procedures and procedures with concomitant operations are reported separately. As the functions of the database only generate the overall complication rate automatically, data was analysed manually to obtain this information.

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).

Table 5: Assignment of risk for complications.

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

CHAPTER 2: Number of procedures and trends

2.1 NUMBER OF PROCEDURES 2008-2017

There were 10557 SSF procedures. There were 9028 (85.5%) sacrospinous colpopexies (SSC) and 1529 (14.5%) sacrospinous hysteropexies (SSH).

Figure 1 & Table 6 shows the number of SSF procedures per year. Although not included in the audit, the number of SSF procedures in 2018 is also shown as sacrocolpopexies and sacrohysteropexies were designated as 'high vigilance restriction' procedures by NHS England in July 2018 [1]. This may have influenced the number of SSF procedures performed that year.

2.2 TRENDS 2008-2018

From 2008 to 2014, the number of SSC procedures entered into the database rose substantially. The number of SSH procedures has remained relatively low throughout the timeframe of the audit. Both procedures saw a fall in numbers from 2017 to 2018 although the fall was larger for SSC, -15.8%, compared with SSH, -4.4%.

Figure 1: Number of sacrospinous colpopexy (SSC) and sacrospinous hysteropexy (SSH) procedures added to the BSUG database per year 2008-2018.

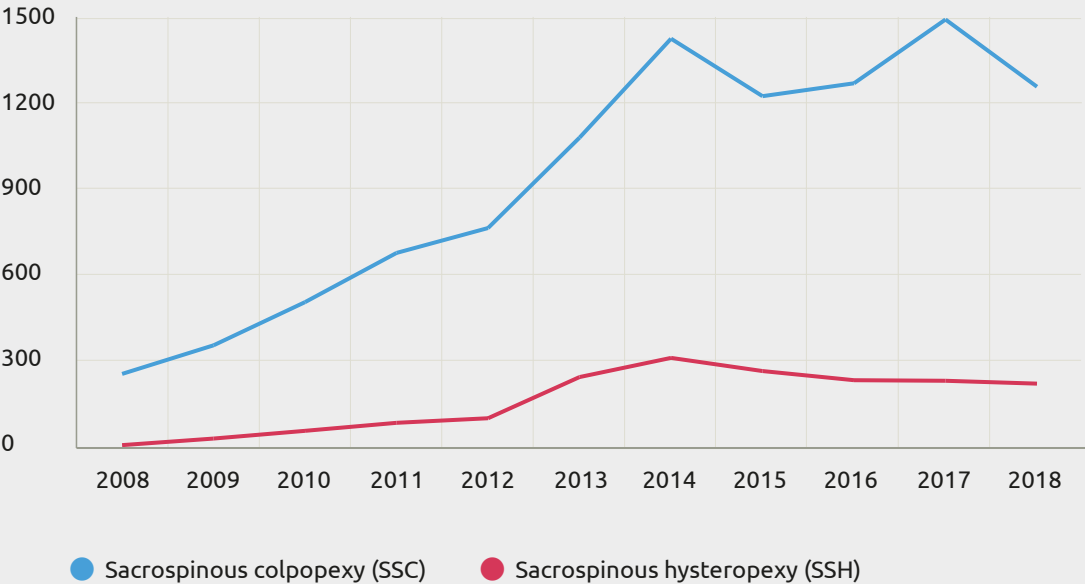


Table 6: Number of sacrospinous colpopexy (SSC) and sacrospinous hysteropexy (SSH) procedures added to the BSUG database per year 2008-2018.

	Sacrospinous colpopexy	Sacrospinous hysteropexy
2008	252	3
2009	352	26
2010	503	53
2011	675	81
2012	762	97
2013	1078	241
2014	1424	308
2015	1223	262
2016	1268	230
2017	1491	228
2018	1256	218
Total	10284	1747

Note: Figures from 2018 excluded from audit analysis

CHAPTER 3: Sole and concomitant procedures

SACROSPINOUS COLPOPEXY

SSC was categorised into (Figure 2, Table 7):

1. SSC only (6.4%)
2. SSC + vaginal hysterectomy +/- other procedures (26.9%)
3. SSC + other procedures (66.7%)

Other Procedures comprised mainly of pelvic floor repairs. 5.9% (532) had continence operations.

SACROSPINOUS HYSTEROPEXY

SSH was categorised into (Figure 2, Table 7):

1. SSH only (6.6%)
2. SSH + other procedures (93.4%)

Other Procedures comprised mainly of pelvic floor repairs. 7.7% (118) had continence operations.

The categories were not automatically separable using the functions of the database. Data was analysed manually to obtain this information.

Figure 2: Sacrospinal fixation: Sole procedures and those with concomitant operations.

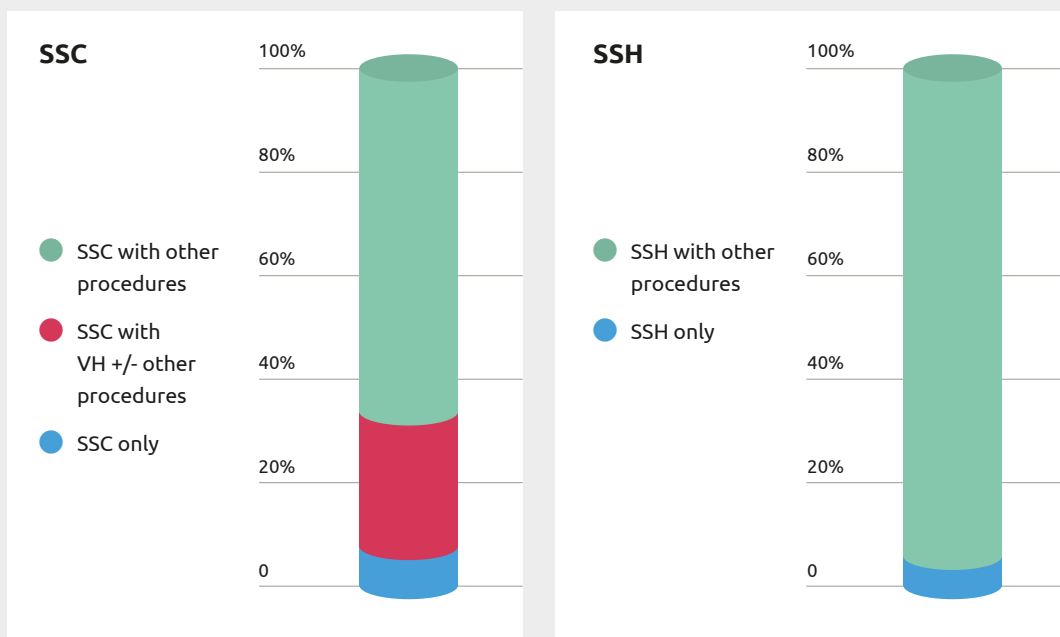


Table 7: Sacrospinous fixation: Sole procedures and those with concomitant operations.

Sacrospinous colpopexy	n (%)
SSC only	581 (6.4%)
SSC with VH +/- other procedures	2429 (26.9%)
SSC with other procedures	6018 (66.7%)
Total	9028

Sacrospinous hysteropexy	n (%)
SSH only	101 (6.6%)
SSH with other procedures	1428 (93.4%)
Total	1529

CHAPTER 4: Primary and repeat operations for prolapse

4.1 SURGERY FOR RECURRENT PROLAPSE

27.8% (2070) of sacrospinous colpopexies were for recurrent prolapse compared with 8.9% (105) of sacrospinous hysteropexies (Figure 3, Table 8).

Figure 3: Sacrospinous fixation: Primary and repeat operations for prolapse.

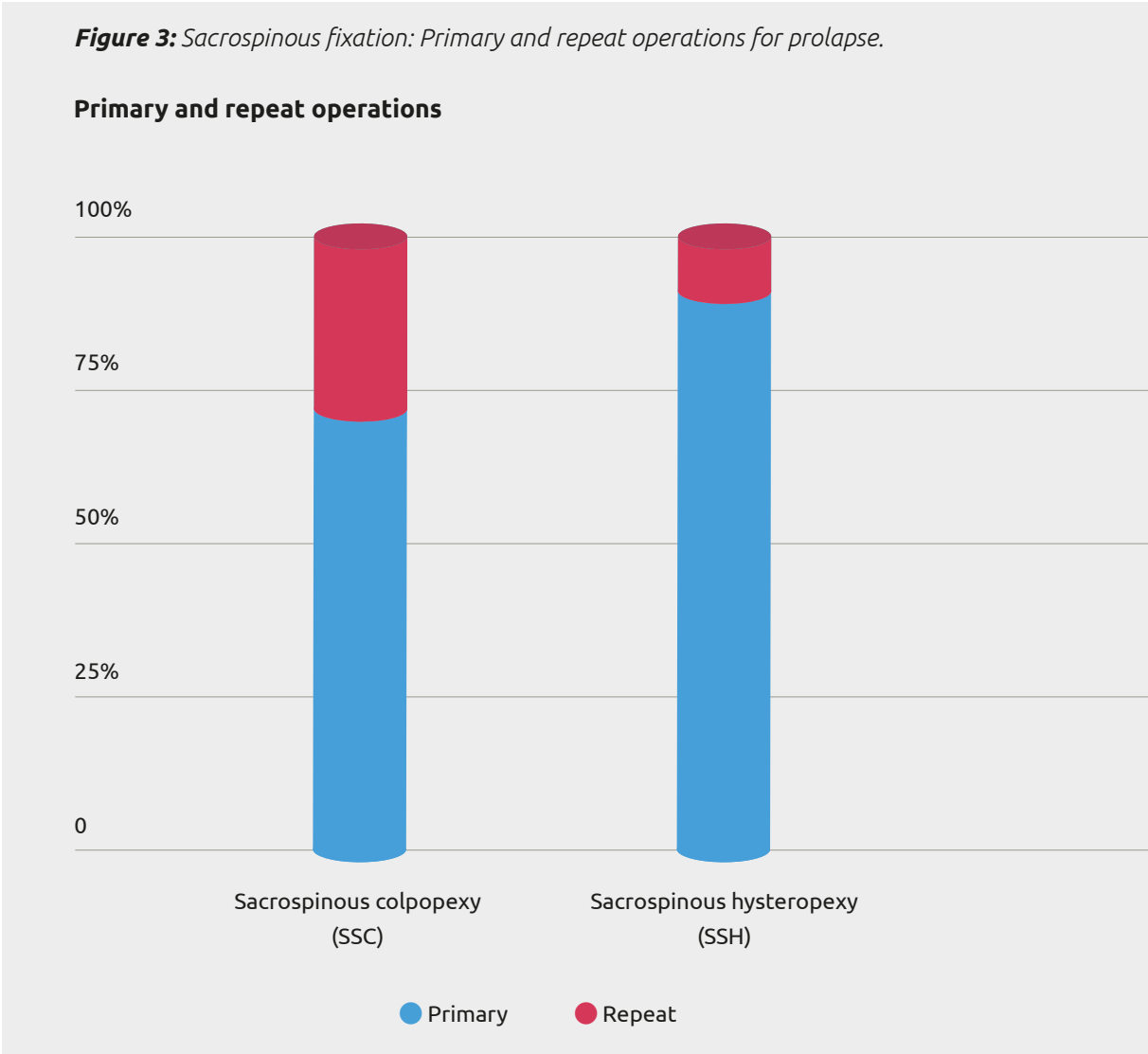


Table 8: Sacrospinous fixation: Primary and repeat operations for prolapse.

	Sacrospinous colpopexy	Sacrospinous hysteropexy
Primary	5385 (72.2%)	1072 (91.1%)
Repeat	2070 (27.8%)	105 (8.9%)
Unanswered	1573	352
Total	9028	1529

CHAPTER 5: Follow-up after surgery

5.1 FOLLOW-UP METHOD

Prespecified methods of follow-up can be recorded in the database (*Table 9*).

SACROSPINOUS COLPOPEXY

6021 (66.7%) sacrospinous colpopexies had the follow-up method recorded. Of these, 92.9% were followed-up in clinic.

SACROSPINOUS HYSTEROPEXY

1028 (67.2%) sacrospinous hysteropexies had the follow-up method recorded. Of these 94.1% had follow-up in clinic.

Table 9: *Sacrospinous fixation: Method of follow-up.*

FU method	Sacrospinous colpopexy	Sacrospinous hysteropexy
Unanswered	3007	501
As per local agreement	55 (0.9%)	30 (2.9%)
GP	7 (0.1%)	1 (0.1%)
Online	6 (0.1%)	2 (0.2%)
OPD	5592 (92.9%)	967 (94.1%)
Postal questionnaire	236 (3.9%)	7 (0.7%)
Telephone	125 (2.1%)	21 (2.0%)
Total	9028	1529

5.2 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 10*).

SACROSPINOUS COLPOPEXY

5919 (65.6%) sacrospinous colpopexies had the 1st follow-up interval recorded. Of these, the 1st follow-up occurred most frequently at 3 months (51.4%).

SACROSPINOUS HYSTEROPEXY

995 (65.1%) of sacrospinous hysteropexies had the 1st follow-up interval recorded. Of these, the 1st follow-up occurred most frequently at 3 months (54.4%).

Table 10: *Sacrospinous fixation: Follow-up interval after surgery.*

	6 weeks	3 months	6 months	12 months	Unanswered	Total
SSC	1651 (27.9%)	3041 (51.4%)	1104 (18.7%)	123 (2.1%)	3109	9028
SSH	291 (29.2%)	541 (54.4%)	146 (14.7%)	17 (1.7%)	534	1529

CHAPTER 6: Global impression of improvement (GII) after surgery

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

Concomitant procedures may have a confounding effect on GII. Therefore, GII for both sole procedures and procedures with concomitant operations are reported separately. As the functions of the database only generate the overall GII automatically, data was analysed manually to obtain this information.

6.1 GII AT 1ST FOLLOW-UP

SACROSPINOUS COLPOPEXY

GII at the 1st follow-up was recorded in 59.6% of cases (5381) (*Table 11*).

Overall, 90.4% (4865) of SSC were Much Better (MB) or Very Much Better (VMB).

84.2% (265) of the SSC Only group were Much Better or Very Much Better.

94.6% (1493) of the SSC with Vaginal Hysterectomy group were Much Better or Very Much Better.

89.1% (3107) of SSC with Other Procedure group were Much Better or Very Much Better.

SACROSPINOUS HYSTEROPEXY

GII at the 1st follow-up was recorded in 59.0% of cases (902) (*Table 12*).

Overall, 90.2% (814) of SSH were Much Better or Very Much Better.

77.5% (45) of the SSH Only group were Much Better or Very Much Better.

88.9% (769) of SSH with Other Procedure group were Much Better or Very Much Better.

Table 11: Sacrospinous colpopexy GII at 1st follow-up. n (%)

SSC	Unanswered	VMB	MB	ALB	NC	ALW	MW	VMW	Total
SSC only	266	192 (61.0)	73 (23.2)	27 (8.6)	19 (6.0)	3 (1.0)	1 (0.3)	0	581
SSC + VH	851	1144 (72.5)	349 (22.1)	48 (3.0)	29 (1.8)	1 (0.06)	5 (0.3)	2 (0.1)	2429
SSC + other procedures	2530	2250 (64.5)	857 (24.6)	227 (6.5)	112 (3.2)	22 (0.6)	13 (0.4)	7 (0.2)	6018
Total	3647	3586 (66.6)	1279 (23.8)	302 (5.6)	160 (3.0)	26 (0.5)	19 (0.4)	9 (0.2)	9028

Table 12. Sacrospinous hysteropexy GII at 1st follow-up. n (%)

SSH	Unanswered	VMB	MB	ALB	NC	ALW	MW	VMW	Total
SSH only	43	35 (60.3)	10 (17.2)	7 (12.1)	5 (8.6)	1 (1.7)	0	0	101
SSH + other procedures	584	563 (65.1)	206 (23.8)	47 (5.4)	24 (2.8)	1 (0.1)	1 (0.1)	2 (0.2)	1428
Total	627	598 (66.3)	216 (23.9)	54 (6.0)	29 (3.2)	2 (0.2)	1 (0.1)	2 (0.2)	1529

6.2 OVERALL GII AT DIFFERENT FOLLOW-UP INTERVALS

SACROSPINOUS COLPOPEXY

59.2% (5347) of SSC had both GII and the 1st follow-up interval recorded (Table 13, shaded area). At 6 weeks, 94.5% of patients were Much Better or Very Much Better. Of the much smaller number of reviews at 12 months, 72.7% were Much Better or Very Much Better.

SACROSPINOUS HYSTEROPEXY

64.7% (989) of SSH had both GII and the 1st follow-up interval recorded (Table 14, shaded area). At 6 weeks, 92.2% of patients were Much Better or Very Much Better. Of the much smaller number of reviews at 12 months, 73.3% were Much Better or Very Much Better.

Table 13: Sacrospinous colpoexy GII at different time intervals. n (%)

SSH	Unanswered	VMB	MB	ALB	NC	ALW	MW	VMW	Total
Unanswered	3075	15	15	4	0	0	0	0	3109
6 weeks	197	1010 (69.5)	363 (25.0)	58 (4.0)	17 (1.2)	2 (0.1)	3 (0.2)	1 (0.07)	1651
3 months	271	1883 (68.0)	661 (23.7)	147 (5.3)	60 (2.2)	11 (0.4)	3 (0.1)	5 (0.2)	3041
6 months	98	616 (61.2)	217 (21.6)	78 (7.8)	74 (7.4)	8 (0.8)	11(1.0)	2 (0.2)	1104
12 months	6	62 (53.0)	23 (19.7)	15 (12.8)	9 (7.7)	5 (4.3)	2 (1.8)	1 (0.9)	123
Total	3647	3586	1279	302	160	26	19	9	9028

Table 14: Sacrospinous hysteropexy GII at different time intervals. n (%)

SSH	Unanswered	VMB	MB	ALB	NC	ALW	MW	VMW	Total
Unanswered	530	2	2	0	0	0	0	0	534
6 weeks	36	154 (60.4)	81 (31.8)	15 (5.9)	5 (2.0)	0	0	0	291
3 months	48	345 (70.0)	104 (21.1)	28 (5.7)	14 (2.8)	1 (0.2)	0	1 (0.2)	541
6 months	11	89 (65.9)	26 (19.3)	9 (6.7)	9 (6.7)	0	1 (0.7)	1 (0.7)	146
12 months	2	8 (53.3)	3 (20.0)	2 (13.3)	1 (6.7)	1 (6.7)	0	0	17
Total	627	598 (66.3)	216 (23.9)	54 (6.0)	29 (3.2)	2 (0.2)	1 (0.1)	2 (0.2)	1529

CHAPTER 7: Complications of surgery

The database records prespecified intraoperative and postoperative complications. Concomitant procedures may have a confounding effect on the complication rate. Therefore, the complication rate for sole procedures, procedures with concomitant operations and the overall rate are reported separately. As the functions of the database only generate the overall complication rate automatically, data was analysed manually to obtain this information.

7.1 INTRAOPERATIVE COMPLICATIONS

SACROSPINOUS COLPOPEXY

The most common intraoperative complications for all procedures combined were blood loss of >500 ml (0.9%), bladder injury (0.3%) and bowel injury (0.2%) (*Table 15, with Table 17 showing the detailed results*).

SACROSPINOUS HYSTEROPEXY

The most common intraoperative complications for all procedures combined were blood loss of >500 ml (0.7%), bladder injury (0.4%) and bowel injury (0.07%) (*Table 15, with Table 18 showing the detailed results*).

Table 15: Sacrospinous fixation intraoperative complications.

	SSC	%	Risk	SSH	%	Risk
Ureteric injury	Overall	0.1	Rare	Overall	0	Very rare
	SSC only	0		SSH only	0	
	SSC + VH	0.2				
	SSC + other	0.07		SSH + other	0	
Bladder injury	Overall	0.3	Uncommon	Overall	0.4	Uncommon
	SSC only	1.1		SSH only	3.2	
	SSC + VH	0.3				
	SSC + other	0.2		SSH + other	0.2	
Urethral injury	Overall	0	Very rare	Overall	0	Very rare
	SSC only	0		SSH only	0	
	SSC + VH	0				
	SSC + other	0		SSH + other	0	
Bowel injury	Overall	0.2	Uncommon	Overall	0.07	Rare
	SSC only	0		SSH only	1.1	
	SSC + VH	0.04				
	SSC + other	0.3		SSH + other	0	
Nerve injury	Overall	0.09	Rare	Overall	0	Very rare
	SSC only	0.2		SSH only	0	
	SSC + VH	0.08				
	SSC + other	0.08		SSH + other	0	
Estimated blood loss >500 ml	Overall	0.9	Uncommon	Overall	0.7	Uncommon
	SSC only	1.1		SSH only	2.1	
	SSC + VH	1.9				
	SSC + other	0.5		SSH + other	0.6	

7.2 POSTOPERATIVE COMPLICATIONS

SACROSPINOUS COLPOPEXY

The most common postoperative complications for all procedures combined were readmission within 30 days of surgery (4.4%), catheterisation for >10 days (3.1%) and return to theatre within 72 hours of surgery (0.8%)

(Table 16, with Table 17 showing the detailed results).

SACROSPINOUS HYSTEROPEXY

The most common postoperative complications for all procedures combined were catheterisation for >10 days (3.5%), readmission within 30 days of surgery (2.2%) and return to theatre within 72 hours of surgery (0.4%)

(Table 16, with Table 18 showing the detailed results).

Table 16: Sacrospinous fixation postoperative complications

	SSC	%	Risk	SSH	%	Risk
Blood transfusion	Overall	0.1	Rare	Overall	0.1	Rare
	SSC only	0		SSH only	0	
	SSC + VH	0.3				
	SSC + other	0.07		SSH + other	0.1	
Venous thromboembolism	Overall	0.01	Very rare	Overall	0	Very rare
	SSC only	0		SSH only	0	
	SSC + VH	0				
	SSC + other	0.02		SSH + other	0	
Death	Overall	0.01	Very rare	Overall	0	Very rare
	SSC only	0		SSH only	0	
	SSC + VH	0				
	SSC + other	0.02		SSH + other	0	
1 death after SSC and pelvic floor repair – readmitted 3 days after discharge with perforated duodenal ulcer						
Return to theatre within 72 hrs	Overall	0.8	Uncommon	Overall	0.4	Uncommon
	SSC only	0.3		SSH only	0	
	SSC + VH	1.0				
	SSC + other	0.7		SSH + other	0.4	
Catheter for > 10 days	Overall	3.0	Common	Overall	3.5	Common
	SSC only	1.7		SSH only	4.5	
	SSC + VH	2.9				
	SSC + other	3.1		SSH + other	3.5	
Readmission within 30 days	Overall	4.4	Common	Overall	2.2	Common
	SSC only	2.8		SSH only	1.5	
	SSC + VH	4.3				
	SSC + other	4.6		SSH + other	2.3	
Sacrospinous colpopexy - 273 readmissions – 9 planned, 42 emergency, 222 unspecified Sacrospinous hysteropexy – 24 readmissions – 1 planned, 6 emergency, 17 unspecified						

Table 17: Detailed SSC complications table.

SSC		%	Yes	No	Unrecorded	Total
Ureteric injury	SSC only	0	0	564	17	581
	SSC + VH	0.2	5	2383	41	2429
	SSC + other	0.07	4	5904	110	6018
	Overall	0.1	9	8851	168	9028
Bladder injury	SSC only	1.1	6	558	17	581
	SSC + VH	0.3	8	2381	40	2429
	SSC + other	0.2	13	5896	109	6018
	Overall	0.3	27	8835	166	9028
Urethral injury	SSC only	0	0	439	142	581
	SSC + VH	0	0	2068	361	2429
	SSC + other	0	0	4992	1026	6018
	Overall	0	0	7499	1529	9028
Bowel injury	SSC only	0	0	564	17	581
	SSC + VH	0.04	1	2388	40	2429
	SSC + other	0.3	15	5894	109	6018
	Overall	0.2	16	8846	166	9028
Nerve injury	SSC only	0.2	1	563	17	581
	SSC + VH	0.08	2	2386	41	2429
	SSC + other	0.08	5	5902	111	6018
	Overall	0.09	8	8851	169	9028
EBL > 500 ml	SSC only	1.1	6	559	16	581
	SSC + VH	1.9	45	2343	41	2429
	SSC + other	0.5	32	5877	109	6018
	Overall	0.9	83	8779	166	9028
Transfusion	SSC only	0	0	564	17	581
	SSC + VH	0.3	6	2382	41	2429
	SSC + other	0.07	4	5905	109	6018
	Overall	0.1	10	8851	167	9028
VTE	SSC only	0	0	532	49	581
	SSC + VH	0	0	2344	85	2429
	SSC + other	0.02	1	5772	245	6018
	Overall	0.01	1	8648	379	9028
Death	SSC only	0	0	531	50	581
	SSC + VH	0	0	2344	85	2429
	SSC + other	0.02	1	5770	247	6018
	Overall	0.01	1	8645	382	9028
	1 death, SSC and pelvic floor repair – readmitted 3 days after discharge with perforated duodenal ulcer					
RTT	SSC only	0.3	1	361	219	581
	SSC + VH	1.0	18	1789	622	2429
	SSC + other	0.7	29	4144	1845	6018
	Overall	0.8	48	6294	2686	9028
Cath > 10 days	SSC only	1.7	6	356	219	581
	SSC + VH	2.9	53	1748	628	2429
	SSC + other	3.1	128	4031	1859	6018
	Overall	3.0	187	6135	2706	9028
Readmission	SSC only	2.8	10	351	220	581
	SSC + VH	4.3	76	1698	655	2429
	SSC + other	4.6	187	3900	1931	6018
	Overall	4.4	273	5949	2806	9028
	Sacrospinous colpopexy - 273 readmissions – 9 planned, 42 emergency, 222 unspecified					

Table 18: Detailed SSH complications table.

SSC		%	Yes	No	Unrecorded	Total
Ureteric injury	SSC only	0	0	94	7	101
	SSC + other	0	0	1414	14	1428
	Overall	0	0	1508	21	1529
Bladder injury	SSC only	3.2	3	91	7	101
	SSC + other	0.2	3	1411	14	1428
	Overall	0.4	6	1502	21	1529
Urethral injury	SSC only	0	0	84	17	101
	SSC + other	0	0	1313	115	1428
	Overall	0	0	1397	132	1529
Bowel injury	SSC only	1.1	1	93	7	101
	SSC + other	0	0	1414	14	1428
	Overall	0.07	1	1507	21	1529
Nerve injury	SSC only	0	0	94	7	101
	SSC + other	0	0	1414	14	1428
	Overall	0	0	1508	21	1529
EBL > 500 ml	SSC only	2.1	2	93	6	101
	SSC + other	0.6	9	1407	12	1428
	Overall	0.7	11	1500	18	1529
Transfusion	SSC only	0	0	94	7	101
	SSC + other	0.1	2	1413	13	1428
	Overall	0.1	2	1507	20	1529
VTE	SSC only	0	0	93	8	101
	SSC + other	0	0	1412	16	1428
	Overall	0	0	1507	22	1529
Death	SSC only	0	0	93	8	101
	SSC + other	0	0	1412	16	1428
	Overall	0	0	1507	22	1529
RTT	SSC only	0	0	67	34	101
	SSC + other	0.4	4	1009	415	1428
	Overall	0.4	4	1076	449	1529
Cath > 10 days	SSC only	4.5	3	64	34	101
	SSC + other	3.5	35	980	413	1428
	Overall	3.5	38	1044	447	1529
Readmission	SSC only	1.5	1	65	35	101
	SSC + other	2.3	23	981	424	1428
	Overall	2.2	24	1046	459	1529
Sacrospinous hysteropexy – 24 readmissions – 1 planned, 6 emergency, 17 unspecified						

CHAPTER 8: Limitations of the audit

Not every operation performed for the treatment of vault prolapse 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.

REFERENCES

1. Letter from NHS England and NHS Improvement to trust medical directors regarding 'high vigilance restriction' procedures. NHS England & NHS Improvement. July 2018.

https://i.emlfiles4.com/cmpdoc/9/7/2/8/1/1/files/47633_mesh-letter-to-acute-ceos-and-mds.pdf

2. Understanding how risk is discussed in healthcare. Royal College of Obstetricians and Gynaecologists (RCOG). 2015.

<https://www.rcog.org.uk/globalassets/documents/patients/patient-information-leaflets/pi-understanding-risk.pdf>