



BRITISH SOCIETY OF  
UROGYNAECOLOGY (BSUG)

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

**SACROCOLPOPEXY REPORT**

BSUG AUDIT AND DATABASE COMMITTEE 2019

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**ABBREVIATIONS**

British Society of Urogynaecology (BSUG)

National Institute for Health and Care Excellence (NICE)

National Health Service (NHS)

Laparoscopic sacrocolpopexy (lap SCP)

Open sacrocolpopexy (open SCP)

Global impression of improvement (GII)

Royal College of Obstetricians and Gynaecologists (RCOG)

Hospital Episode Statistics (HES)

# Preface

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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] which includes sacrocolpopexy and sacrohysteropexy.

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 Sacrocolpopexy 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 laparoscopic and open sacrocolpopexy. A separate National Report on Sacrohysteropexy is available. 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

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## 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 operations included in this audit are:

1. Laparoscopic sacrocolpopexy (lap SCL) - laparoscopic cervicopexy is included in this group.
2. Open sacrocolpopexy (open SCL) - open cervicopexy is included in this group.

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*). Sacrocolpopexies 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

The database allows users to record the occurrence of postoperative 'graft complications'. It does not specify the exact nature of the complication and could encompass various mesh-related problems including pain, infection, urinary symptoms and mesh exposure or erosion. It was therefore not possible to categorise mesh complications more precisely for this report, but much more detailed assessments have now been added to the BSUG database.

It is important to note that sacrocolpopexy 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 (RCOG) [2] (Table 5).

**Table 5:** *Assignment of risk for complications.*

<b>Term</b>	<b>Equivalent numerical ratio</b>	<b>Colloquial equivalent</b>
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

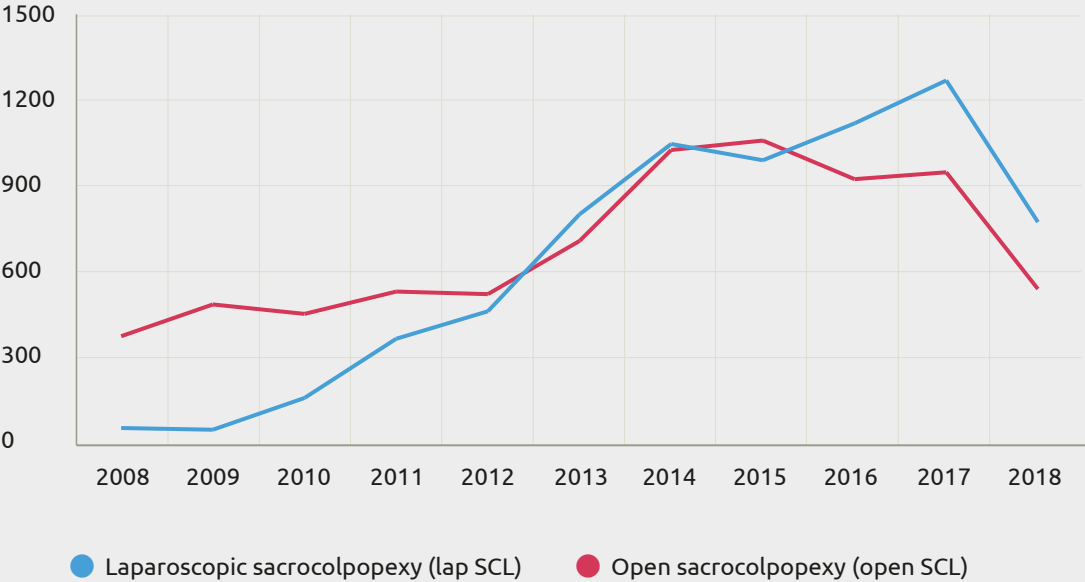
There were 4469 sacrocolpopexies. There were 2115 (47.3%) laparoscopic sacrocolpopexies (lap SCL) and 2354 (52.7%) open sacrocolpopexies (open SCL).

Figure 1, Table 6 shows the number of sacrocolpopexies per year. Although not included in the audit, the number of 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 procedures performed that year.

## 2.2 TRENDS 2008-2018

From 2014 to 2017, there was a slight fall in the number of open SCL. During this period, the number of lap SCL increased. There has been a sharp fall in the numbers for both procedures in 2018 compared to 2017. During this period, the number of lap SCL and open SCL fell by 38.9% and 42.9% respectively.

**Figure 1:** Number of laparoscopic sacrocolpopexy (lap SCL) and open sacrocolpopexy (open SCL) procedures added to the BSUG database per year 2008 – 2018.



**Table 6:** Number of laparoscopic sacrocolpopexy (lap SCL) and open sacrocolpopexy (open SCL) procedures added to the BSUG database per year 2008 – 2018.

	Laparoscopic sacrocolpopexy	Open sacrocolpopexy
2008	19	126
2009	17	163
2010	54	152
2011	123	178
2012	155	175
2013	268	237
2014	350	343
2015	331	354
2016	374	309
2017	424	317
2018	259	181
<b>Total</b>	<b>2374</b>	<b>2535</b>

**Note:** Figures from 2018 excluded from audit analysis.

## CHAPTER 3: Sole and concomitant procedures

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### LAPAROSCOPIC SACROCOLPOPEXY

Lap SCL was categorised into (*Figure 2, Table 7*):

1. Lap SCL only (74.6%)
2. Lap SCL + hysterectomy (total/subtotal) +/- other procedures (4.6%)
3. Lap SCL + other procedures (20.8%)

Other Procedures comprised mainly of pelvic floor repairs. 3.7% (79) had continence operations as well.

### OPEN SACROCOLPOPEXY

Open SCL was categorised into (*Figure 2, Table 7*):

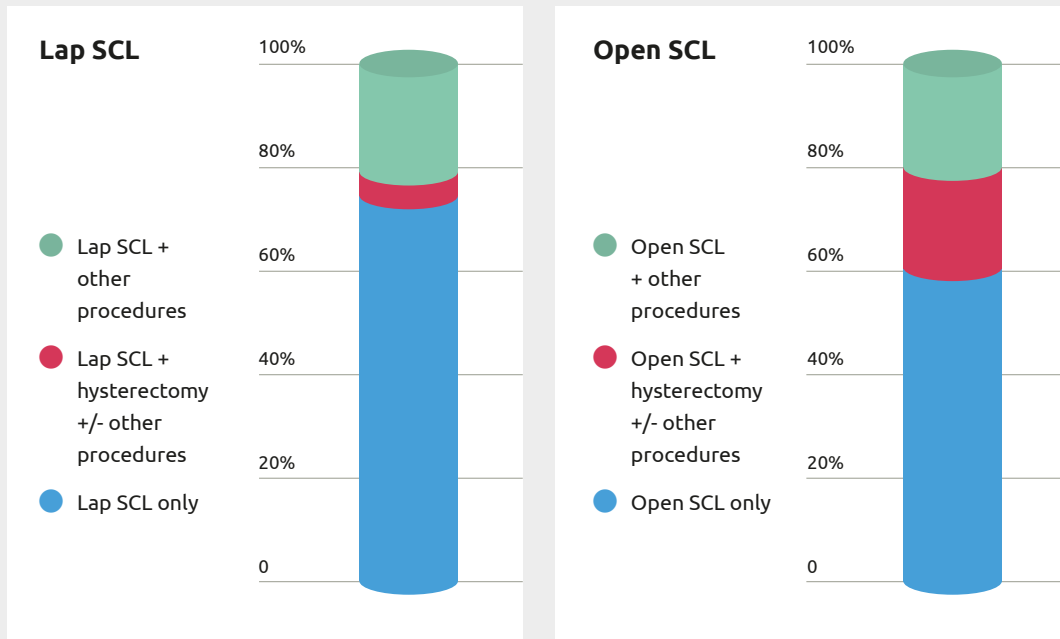
1. Open SCL only (60.7%)
2. Open SCL + hysterectomy (total/subtotal) +/- other procedures (19.4%)
3. Open SCL + other procedures (19.9%)

Other Procedures comprised mainly of pelvic floor repairs. 7.6% (179) had continence operations as well.

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

There were more SCL Only procedures in the lap SCL compared with the open SCL group (74.6% vs 60.7%). More hysterectomies were carried out in the open SCL compared with the lap SCL group (19.4% vs 4.6%). Most of the hysterectomies in both groups were subtotal hysterectomies.

**Figure 2:** Sacrocolpopexy: Sole procedures and those with concomitant operations.



**Table 7:** Sacrocolpopexy: Sole procedures and those with concomitant operations.

Laparoscopic sacrocolpopexy	n (%)
Lap SCL only	1578 (74.6%)
Lap SCL + hysterectomy +/- other procedures	97 (4.6%)
Lap SCL + other procedures	440 (20.8%)
<b>Total</b>	<b>2115</b>

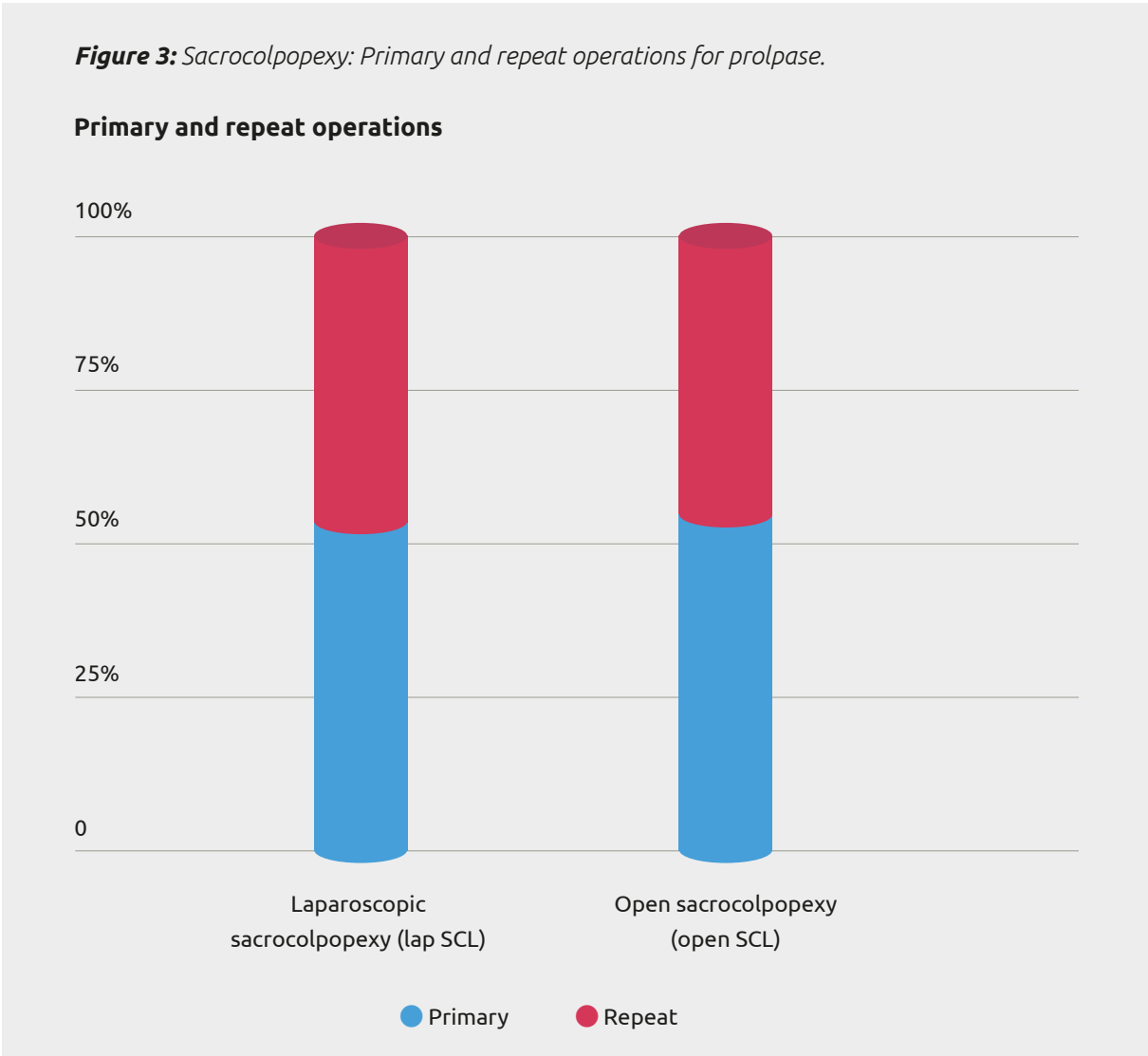
  

Open sacrocolpopexy	n (%)
Open SCL only	1428 (60.7%)
Open SCL + hysterectomy +/- other procedures	457 (19.4%)
Open SCL + other procedures	469 (19.9%)
<b>Total</b>	<b>2354</b>

# CHAPTER 4: Primary and repeat operations for prolapse

## 4.1 SURGERY FOR RECURRENT PROLAPSE

46.4% (849) of lap SCL were for recurrent prolapse with 45.3% (884) for open SCL.  
 (Figure 3, Table 8).



**Table 8:** Primary and repeat operations.

	Laparoscopic sacrocolpopexy	Open sacrocolpopexy
Primary	981 (53.6%)	1067 (54.7%)
Repeat	849 (46.4%)	884 (45.3%)
Unanswered	285	403
<b>Total</b>	<b>2115</b>	<b>2354</b>

## CHAPTER 5: Follow-up after surgery

### 5.1 FOLLOW-UP METHOD

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

#### LAPAROSCOPIC SACROCOLPOPEXY

1446 (68.4%) lap SCL had the follow-up method recorded. Of these, 1371 (94.8%) were followed-up in clinic.

#### OPEN SACROCOLPOPEXY

1601 (68.0%) open SCL had the follow-up method recorded. Of these, 1513 (94.5%) were followed-up in clinic.

**Table 9:** *Follow-up method.*

	Laparoscopic sacrocolpopexy	Open sacrocolpopexy
As per local agreement	0	34 (2.1%)
GP practice	0	1 (0.06%)
Outpatient visit	1371 (94.8%)	1513 (94.5%)
Postal questionnaire	57 (3.9%)	36 (2.2%)
Telephone response	18 (1.2%)	17 (1.1%)
Unanswered	669	753
<b>Total</b>	<b>2115</b>	<b>2354</b>

## 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*).

### LAPAROSCOPIC SACROCOLPOPEXY

1429 (67.6%) lap SCL had the 1st follow-up interval recorded. The 1st follow-up occurred most frequently at 3 months (54.4%).

### OPEN SACROCOLPOPEXY

1565 (66.5%) of open SCL had the 1st follow-up interval recorded. The 1st follow-up occurred most frequently at 3 months (43.1%).

**Table 10:** *Sacrocolpopexy: Follow-up interval after surgery*

	6 weeks	3 months	6 months	12 months	Unanswered	Total
Lap SCL	236 (16.5%)	777 (54.4%)	361 (25.3%)	55 (3.8%)	686	2115
Open SCL	535 (34.2%)	675 (43.1%)	314 (20.1%)	41 (2.6%)	789	2354

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

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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 1<sup>ST</sup> FOLLOW-UP

#### LAPAROSCOPIC SACROCOLPOPEXY

GII at the 1st follow-up was recorded in 64.4% (1364) of cases (*Table 11*).

Overall, 92.2% (1257) of patients who had lap SCL were Much Better (MB) or Very Much Better (VMB).

91.0% (933) of patients in the lap SCL Only group were Much Better or Very Much Better.

98.4% (64) of the lap SCL + Hysterectomy group were Much Better or Very Much Better.

95.6% (260) of the lap SCL + Other Procedure group were Much Better or Very Much Better.

#### OPEN SACROCOLPOPEXY

GII at the 1st follow-up was recorded in 61.9% of cases (1456) (*Table 12*).

Overall, 96.1% (1400) of patients who had open SCL were Much Better (MB) or Very Much Better (VMB).

95.4% (784) of patients in the open SCL Only group were Much Better or Very Much Better.

96.9% (314) of the open SCL + Hysterectomy group were Much Better or Very Much Better.

97.5% (302) of the open SCL + Other Procedure group were Much Better or Very Much Better.



**Table 11:** Laparoscopic sacrocolpopexy GII at 1st follow-up. n (%)

Lap SCL	Unanswered	VMB	MB	ALB	NC	ALW	MW	VMW	Total
Lap SCL only	552	720 (70.2)	213 (20.8)	54 (5.2)	19 (1.9)	7 (0.7)	9 (0.9)	4 (0.4)	1578
Lap SCL + hysterectomy	32	50 (76.9)	14 (21.5)	1 (1.5)	0	0	0	0	97
Lap SCL + other	168	206 (75.7)	54 (19.9)	10 (3.7)	1 (0.4)	0	0	1 (0.4)	440
Total	752	976 (71.6)	281(20.6)	65 (4.8)	20 (1.5)	7 (0.5)	9 (0.7)	5 (0.4)	2115

**Table 12:** Open sacrocolpopexy GII at 1st follow-up. n (%)

Open SCL	Unanswered	VMB	MB	ALB	NC	ALW	MW	VMW	Total
Open SCL only	606	627 (76.3)	157 (19.1)	24 (2.9)	11 (1.3)	2 (0.2)	0	1 (0.1)	1428
Open SCL + hysterectomy	133	252 (77.8)	62 (19.1)	5 (1.5)	3 (0.9)	0	0	2 (0.6)	457
Open SCL + other	159	237 (76.5)	65 (21.0)	3 (1.0)	3 (1.0)	2 (0.6)	0	0	469
Total	898	1116 (76.6)	284 (19.5)	32 (2.2)	17 (1.2)	4 (0.3)	0	3 (0.2)	2354

## 6.2 GII AT DIFFERENT FOLLOW-UP INTERVALS

### LAPAROSCOPIC SACROCOLPOPEXY

63.5% (1344) of lap SCL operations had both GII and the 1st follow-up interval recorded (Table 13, shaded area). At 6 weeks, 94.2% of patients were Much Better or Very Much Better. Of the much smaller number of reviews at 12 months, 84.0% were Much Better or Very Much Better.

### OPEN SACROCOLPOPEXY

61.6% (1449) of open SCL operations had both GII and the 1st follow-up interval recorded (Table 14, shaded area). At 6 weeks, 97.2% of patients were Much Better or Very Much Better. Of the much smaller number of reviews at 12 months, 97.0% were Much Better or Very Much Better.

**Table 13:** Laparoscopic sacrocolpopexy GII at different time intervals. n (%)

Lap SCL	Unanswered	VMB	MB	ALB	NC	ALW	MW	VMW	Total
<b>Unanswered</b>	665	8	9	2	1	0	1	0	686
<b>6 weeks</b>	11	164 (72.9)	48 (21.3)	10 (4.4)	1 (0.4)	1 (0.4)	1 (0.4)	0	236
<b>3 months</b>	43	543 (74.0)	139 (18.9)	31 (4.2)	9 (1.2)	5 (0.7)	4 (0.5)	3 (0.4)	777
<b>6 months</b>	28	230 (69.1)	74 (22.2)	18 (5.4)	7 (2.1)	0	2 (0.6)	2 (0.6)	361
<b>12 months</b>	5	31 (62.0)	11 (22.0)	4 (8.0)	2 (4.0)	1 (2.0)	1 (2.0)	0	55
<b>Total</b>	752	976	281	65	20	7	9	5	2115

**Table 14:** Open sacrocolpopexy GII at different time intervals. n (%)

Open SCL	Unanswered	VMB	MB	ALB	NC	ALW	MW	VMW	Total
<b>Unanswered</b>	782	4	2	1	0	0	0	0	789
<b>6 weeks</b>	36	391 (78.4)	94 (18.8)	8 (1.6)	3 (0.6)	1 (0.2)	0	2 (0.4)	535
<b>3 months</b>	51	460 (73.7)	135 (21.6)	18 (2.9)	9 (1.4)	2 (0.3)	0	0	675
<b>6 months</b>	21	234 (79.9)	48 (16.4)	4 (1.4)	5 (1.7)	1 (0.3)	0	1 (0.3)	314
<b>12 months</b>	8	27 (81.8)	5 (15.2)	1 (3.0)	0	0	0	0	41
<b>Total</b>	898	1116	284	32	17	4	0	3	2354

## CHAPTER 7: Complications of surgery

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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

#### LAPAROSCOPIC SACROCOLPOPEXY

The most common intraoperative complications for all procedures combined in the lap SCL group were bladder injury (2.0%), bowel injury and blood loss of >500 ml (both 0.2%) (*Table 15, with Table 17 showing the detailed results*).

#### OPEN SACROCOLPOPEXY

The most common intraoperative complications for all procedures combined in the open SCL group were bladder injury (1.5%), blood loss of >500 ml (0.4%) and bowel injury (0.3%) (*Table 15, with Table 18 showing the detailed results*).

**Table 15:** Sacrocolpopexy intraoperative complications.

		Lap SCL %	Risk	Open SCL %	Risk
Ureteric injury	Overall	0	Very rare	0.09	Rare
	Lap SCL only	0		0.14	
	Lap SCL + hysterectomy +/- other procedure	0		0	
	Lap SCL + other procedure	0		0	
Bladder injury	Overall	2.0	Common	1.5	Common
	Lap SCL only	1.8		1.9	
	Lap SCL + hysterectomy +/- other procedure	0		0.2	
	Lap SCL + other procedure	2.7		1.3	
Urethral injury	Overall	0	Very rare	0	Very rare
	Lap SCL only	0		0	
	Lap SCL + hysterectomy +/- other procedure	0		0	
	Lap SCL + other procedure	0		0	
Bowel injury	Overall	0.2	Uncommon	0.3	Uncommon
	Lap SCL only	0.3		0.4	
	Lap SCL + hysterectomy +/- other procedure	0		0.2	
	Lap SCL + other procedure	0.2		0.4	
	1 femoral nerve injury in the open SCL group				
Nerve injury	Overall	0	Very rare	0.04	Rare
	Lap SCL only	0		0.07	
	Lap SCL + hysterectomy +/- other procedure	0		0	
	Lap SCL + other procedure	0		0	
Estimated blood loss >500 ml	Overall	0.2	Uncommon	0.4	Uncommon
	Lap SCL only	0.2		0.4	
	Lap SCL + hysterectomy +/- other procedure	0		0.4	
	Lap SCL + other procedure	0.5		0.4	

## 7.2 POSTOPERATIVE COMPLICATIONS

### LAPAROSCOPIC SACROCOLPOPEXY

The most common postoperative operative complications for all procedures combined were readmission within 30 days of surgery (2.8%), catheterisation for >10 days (2.1%) and postoperative graft complication (1.4%) (*Table 16, with Table 17 showing the detailed results*).

### OPEN SACROCOLPOPEXY

The most common postoperative complications for all procedures combined were readmission within 30 days of surgery (5.3%), catheterisation for >10 days (1.5%) and return to theatre within 72 hours (1.1%) (*Table 16, with Table 18 showing the detailed results*).

### POSTOPERATIVE GRAFT COMPLICATION

The database allows users to record the presence or absence of a 'postoperative graft complication' at follow-up. The term does not specify the exact nature of the complication and could encompass various mesh-related problems including pain, infection, urinary symptoms or mesh exposure and erosion. It was therefore not possible to categorise mesh complications more specifically.

An exact incidence of postoperative graft complications was difficult to obtain due to the lack of long-term follow-up and missing values. In addition, use of the database is voluntary and can only be accessed by BSUG members. These factors are likely to result in an underestimation of the incidence.

**Table 16:** Sacrocolpopexy postoperative complications.

		Lap SCL %	Risk	Open SCL %	Risk	
Blood transfusion	Overall	0.1	Uncommon	0.3	Uncommon	
	Lap SCL only	0.07		0.4		
	Lap SCL + hysterectomy +/- other procedure	0		0		
	Lap SCL + other procedure	0.5		0.2		
Venous thromboembolism	Overall	0.05	Rare	0	Very rare	
	Lap SCL only	0.07		0		
	Lap SCL + hysterectomy +/- other procedure	0		0		
	Lap SCL + other procedure	0		0		
Death	Overall	0.05	Rare	0.4	Rare	
	Lap SCL only	0		0.07		
	Lap SCL + hysterectomy +/- other procedure	0		0		
	Lap SCL + other procedure	0.2		0		
	1 death in the open SCL group – no information available					
	1 death in the lap SCL group – no information available					
Return to theatre within 72 hours of surgery	Overall	0.6	Uncommon	1.1	Common	
	Lap SCL only	0.8		1.4		
	Lap SCL + hysterectomy +/- other procedure	0		0.6		
	Lap SCL + other procedure	0		0.9		
Catheterisation for > 10 days	Overall	2.1	Common	1.5	Common	
	Lap SCL only	1.7		2.0		
	Lap SCL + hysterectomy +/- other procedure	1.4		0.3		
	Lap SCL + other procedure	3.3		1.4		
Readmission within 30 days of surgery	Overall	2.8	Common	5.3	Common	
	Lap SCL only	3.0		6.7		
	Lap SCL + hysterectomy +/- other procedure	2.9		3.2		
	Lap SCL + other procedure	2.4		3.5		
	Lap SCL - 41 readmissions – 4 elective, 14 emergency, 41 unspecified Open SCL - 85 readmissions – 24 emergency, 61 unspecified					
Postoperative graft complication	Overall	1.4	Common	0.9	Uncommon	
	Lap SCL only	1.6		1.1		
	Lap SCL + hysterectomy +/- other procedure	0		0.4		
	Lap SCL + other procedure	1.4		1.1		

**Table 17:** Detailed lap SCL complications table.

Lap SCL		%	Yes	No	Unrecorded	Total
Ureteric injury	Lap SCL only	0	0	1527	51	1578
	+ hyst +/- other	0	0	97	0	97
	+ other	0	0	434	6	440
	Overall	0	0	2058	57	2115
Bladder injury	Lap SCL only	1.8	29	1500	49	1578
	+ hyst +/- other	0	0	97	0	97
	+ other	2.7	12	422	6	440
	Overall	2.0	41	2019	55	2115
Urethral injury	Lap SCL only	0	0	1429	149	1578
	+ hyst +/- other	0	0	88	9	97
	+ other	0	0	400	40	440
	Overall	0	0	1917	198	2115
Bowel injury	Lap SCL only	0.3	4	1523	51	1578
	+ hyst +/- other	0	0	97	0	97
	+ other	0.2	1	433	6	440
	Overall	0.2	5	2053	57	2115
Nerve injury	Lap SCL only	0	0	1527	51	1578
	+ hyst +/- other	0	0	97	0	97
	+ other	0	0	434	6	440
	Overall	0	0	2058	57	2115
EBL > 500 ml	Lap SCL only	0.2	3	1524	51	1578
	+ hyst +/- other	0	0	97	0	97
	+ other	0.5	2	432	6	440
	Overall	0.2	5	2053	57	2115
Transfusion	Lap SCL only	0.07	1	1526	51	1578
	+ hyst +/- other	0	0	97	0	97
	+ other	0.5	2	432	6	440
	Overall	0.1	3	2055	57	2115
VTE	Lap SCL only	0.07	1	1517	60	1578
	+ hyst +/- other	0	0	95	2	97
	+ other	0	0	428	12	440
	Overall	0.05	1	2040	74	2115
Death	Lap SCL only	0	0	1518	60	1578
	+ hyst +/- other	0	0	95	2	97
	+ other	0.2	1	427	12	440
	Overall	0.05	1	2040	74	2115
RTT	Lap SCL only	0.8	9	1083	486	1578
	+ hyst +/- other	0	0	69	28	97
	+ other	0	0	302	138	440
	Overall	0.6	9	1454	652	2115
Cath > 10 days	Lap SCL only	1.7	19	1070	489	1578
	+ hyst +/- other	1.4	1	68	28	97
	+ other	3.3	10	290	140	440
	Overall	2.1	30	1428	657	2115
Readmission	Lap SCL only	3.0	32	1047	499	1578
	+ hyst +/- other	2.9	2	66	29	97
	+ other	2.4	7	290	143	440
	Overall	2.8	41	1403	671	2115
	41 readmissions – 4 elective, 14 emergency, 41 unspecified					
Postop graft complication	Lap SCL only	1.6	13	824	741	1578
	+ hyst +/- other	0	0	61	36	97
	+ other	1.4	3	207	230	440
	Overall	1.4	16	1092	1007	2115

**Table 18:** Detailed open SCL complications table.

Open SCL		%	Yes	No	Unrecorded	Total
Ureteric injury	Open SCL only	0.14	2	1413	13	1428
	+ hyst +/- other	0	0	455	2	457
	+ other	0	0	464	5	469
	Overall	0.09	2	2332	20	2354
Bladder injury	Open SCL only	1.9	27	1389	12	1428
	+ hyst +/- other	0.2	1	454	2	457
	+ other	1.3	6	458	5	469
	Overall	1.5	34	2301	19	2354
Urethral injury	Open SCL only	0	0	1108	320	1428
	+ hyst +/- other	0	0	395	62	457
	+ other	0	0	340	129	469
	Overall	0	0	1843	511	2354
Bowel injury	Open SCL only	0.4	5	1410	13	1428
	+ hyst +/- other	0.2	1	454	2	457
	+ other	0.4	2	462	5	469
	Overall	0.3	8	2326	20	2354
Nerve injury	Open SCL only	0.07	1	1414	13	1428
	+ hyst +/- other	0	0	455	2	457
	+ other	0	0	464	5	469
	Overall	0.04	1	2333	20	2354
EBL > 500 ml	Open SCL only	0.4	6	1410	12	1428
	+ hyst +/- other	0.4	2	453	2	457
	+ other	0.4	2	462	5	469
	Overall	0.4	10	2325	19	2354
Transfusion	Open SCL only	0.4	7	1407	14	1428
	+ hyst +/- other	0	0	455	2	457
	+ other	0.2	1	463	5	469
	Overall	0.3	8	2325	21	2354
VTE	Open SCL only	0	0	1348	80	1428
	+ hyst +/- other	0	0	446	11	457
	+ other	0	0	443	26	469
	Overall	0	0	2237	117	2354
Death	Open SCL only	0.07	1	1346	81	1428
	+ hyst +/- other	0	0	446	11	457
	+ other	0	0	443	26	469
	Overall	0.04	1	2235	118	2354
RTT	Open SCL only	1.4	13	943	472	1428
	+ hyst +/- other	0.6	2	348	107	457
	+ other	0.9	3	348	118	469
	Overall	1.1	18	1639	697	2354
Cath > 10 days	Open SCL only	2.0	19	934	475	1428
	+ hyst +/- other	0.3	1	348	108	457
	+ other	1.4	5	346	118	469
	Overall	1.5	25	1628	701	2354
Readmission	Open SCL only	6.7	62	869	497	1428
	+ hyst +/- other	3.2	11	333	113	457
	+ other	3.5	12	332	125	469
	Overall	5.3	85	1534	735	2354
85 readmissions – 24 emergency, 61 unspecified						
Postop graft complication	Open SCL only	1.1	6	529	893	1428
	+ hyst +/- other	0.4	1	251	205	457
	+ other	1.1	2	176	291	469
	Overall	0.9	9	956	1389	2354



## CHAPTER 8: Limitations of the audit

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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.

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