Int Urogynecol J (2011) 22:517–528
DOI 10.1007/s00192-011-1379-2

ORIGINAL ATICLE

The UK national prolapse survey: 5 years on

Swati Jha · Paul Moran

Received: 27 October 2010 / Accepted: 30 January 2011 / Published online: 22 February 2011

Abstract
Introduction and hypothesis The objective of this study was to assess trends in the surgical management of pelvic organ prolapse (POP) amongst UK practitioners and the changes in management since this survey was first conducted 5 years ago.
Methods A postal questionnaire survey was sent to practising consultant gynaecologists in UK hospitals. They included urogynaecologists in tertiary centres, gynaecologists with a designated special interest in urogynaecology, and general gynaecologists. The questionnaire included case scenarios encompassing contentious issues in the surgical management of POP and was a revised version of the questionnaire sent 5 years ago.
Results Two hundred and eighteen responses were received of which 190 were completed. For anterior vaginal wall prolapse, anterior colporrhaphy was still the procedure of choice in 71% of respondents. There was a significant rise in graft usage, particularly synthetic graft for recurrent prolapse (56%). A Burch was being performed by only 1% compared to 11% 5 years ago. In women with uterovaginal prolapse, the procedure of choice was still a vaginal hysterectomy and repair (82%). Thirty-five percent of respondents would operate in women whose family was incomplete. In women with posterior vaginal wall prolapse, the procedure of choice was posterior colporrhaphy with midline fascial plication in 66%, marginally less than the previous (75%). For vault prolapse, 73% of respondents would operate, and 43% would perform urodynamics prior to surgery. The procedure of choice was an abdominal sacrocolpopexy (44%), slightly greater than 5 years ago when it was 38%.
Conclusions Basic trends in prolapse surgery remain unchanged. The increase in the use of grafts is in patients with recurrent prolapse.

Keywords Prolapse · Incontinence · Survey · Urodynamics · Sacrocolpopexy · Pelvic organ prolapse · Cystocele · Rectocele · Vault prolapse · Vault prolapse · Enterocele · Graft · Mesh

Introduction

Currently, there are widespread variations in practice in the conservative and surgical management of prolapse in the UK. Five years ago, a national survey on the management of prolapse [1] in the UK was conducted which highlighted these variations. The objective of the national prolapse survey was to gain insight into the changing trends in the surgical management of various types of prolapse in different clinical settings, and to compare these changes to the first national UK prolapse survey conducted 5 years ago. Practice amongst the urogynaecologists working in the tertiary centres, generalists with a special interest in urogynaecology and the general gynaecologists within the UK were also assessed.

S. Jha (✉)
Sheffield Teaching Hospitals NHS Foundation Trust,
Sheffield, South Yorkshire, UK
e-mail: swatijha83@hotmail.com

P. Moran
Worcestershire Royal Hospital,
Charles Hastings Way,
WR 5 1DD Worcester, UK

We hypothesised that there would be a significant change in the surgical trends for the management of prolapse particularly with the increasing popularity of grafts.

Methods

This was a postal questionnaire survey. The initial questionnaire, used in the survey of 2005, was developed following a pilot study which was carried out on the seven consultant gynaecologists at Worcestershire Royal Hospital. The method of questionnaire development is given in the initial article detailing the survey [1]. Case scenarios formulated for the first survey were modified to incorporate a further range of options, taking into account the current practice trends in surgical correction of prolapse. The questions constituting the final questionnaire incorporated the management of anterior vaginal wall prolapse (question 1), uterine prolapse in conjunction with vaginal wall prolapse (question 2), posterior vaginal wall prolapse (question 3), and vaginal vault prolapse (question 4) as in the previous survey. We also asked respondents on how they classified pelvic organ prolapse and the degree of follow-up patients received following prolapse surgery, and if they were using the BSUG database for auditing the results of their surgery.

The addresses were obtained from the Gynecare database of practising UK obstetricians and gynaecologists. This database is updated to include new consultants joining a trust; however, those leaving or retiring were not always accounted for. This would explain why a proportion of the questionnaires were returned without being completed. The database used for this survey was considerably smaller than the previous one because fewer consultants were registered as undertaking prolapse surgery. A covering letter describing the objectives of the study accompanied the questionnaire. After 4 weeks, the questionnaire was resent to non-respondents. This was again repeated after a further 4 weeks.

As this was a review of clinician's practice, we were advised by the Local Research and Ethics Committee that formal ethical approval was not required for the study. In addition, consent to use the information provided was obtained in the questionnaire from the respondents. Respondents who did not give consent to use the information provided were excluded from the analysis.

The analysis was performed by looking at the overall percentage response to each individual question. This was compared to the results from 5 years ago using the chi-square test and p values calculated to determine if the difference in the response was statistically significant. The responses between groups A (urogynaecologists) versus B (gynaecologist with a special interest in urogynaecology) and A versus C (generalists) were also compared as in the previous survey.

A $p<0.05$ was set as statistically significant.

Results

Five hundred and forty-nine questionnaires were sent out of which 218 responses were returned (40%). Of these, 190 were completed giving a useable response rate of 35%. The 28 incomplete responses were from UK consultants who had left the trust, were now retired, were not performing prolapse surgery or were practising only obstetrics. Sixty-nine of 190 (36%) respondents from the previous survey also responded in this survey. Both the response rate and useable response rate were better than in the previous survey in which they were 33% and 28%, respectively, though overall numbers of questionnaires sent were far fewer and so too were the overall responses received.

Of the completed responses received, 20% (38/190) were from urogynaecologists (group A) working in tertiary centres, 52% (99/190) were from gynaecologists with a special interest in urogynaecology (group B) and 21% (39/190) were from general gynaecologists (group C). Seven percent (14/190) did not specify their designation. The 7% responses in which designation was not specified were analysed in the overall assessment, but were excluded from the analysis when comparing the three target groups. Compared to the previous survey, there was a greater response from the urogynaecologists and fewer responses from the generalists.

Anterior wall prolapse

For anterior vaginal wall prolapse, anterior colporrhaphy was the procedure of choice in 71% of respondents. This was a non-significant change from 5 years ago when it was 77%. With concomitant urodynamic stress incontinence, a Burch was the procedure of choice in only 1% compared to 11% 5 years ago. This change was significant ($p<0.003$). Eighty-six percent of respondents would perform a midurethral tape combined with repair, whereas 5 years ago, this was 71% representing a significant rise ($p<0.015$).

Eleven percent of respondents used a graft for primary prolapse compared to 10% in the previous survey, whereas 56% would do so for a recurrent anterior wall prolapse either alone or in combination with fascial plication. The use of graft for recurrent prolapse was a significant rise from the previous survey ($p<0.002$). For both primary and secondary repairs, there was a significant increase in the use of synthetic grafts with a corresponding decrease in the use of biological grafts. Results are shown in Table 1.

Table 1 Question 1: anterior vaginal wall prolapse

		5 years ago	Current
Procedure of choice for primary repair	Anterior colporrhaphy	77%	71%
	Graft±fascial plication	10%	11%
		24% synthetic	52% synthetic
		76% biological	48% biological
	Paravaginal repair	6%	9%
	Others	7%	9%
Procedure of choice for concurrent USI	TVT/TVT-O + anterior repair	71%	86%
	Colposuspension	11%	1%
	Others	18%	13%
Procedure of choice for recurrent anterior wall prolapse	Anterior colporrhaphy	45%	21%
	Graft±fascial plication	34%	56%
	Paravaginal repair	28% synthetic	55% synthetic
	Others	72% biological	45% biological
		15%	11%
		6%	12%
Would surgery be undertaken in women whose family is incomplete	Yes	44%	48%
	No	56%	52%
Would the procedure change in women who are not sexually active	Yes	27%	28%
	No	73%	72%

When comparing the groups A, B and C, group A performed anterior colporrhaphy in 89% compared to 64% amongst group B and 74% in group C. Group A were therefore significantly more likely to perform anterior repairs compared to group C (89% vs 74%; $p=0.01$) and compared to group B (89% vs 64%; $p<0.001$). The use of PDS in the different groups was statistically more in group A when compared to group C (34% vs 5%; $p<0.0001$) but was not statistically different for group B (34% vs 26%; $p=0.21$). Three percent of group A, 16% of group B and 10% of group C used a graft for primary anterior wall repair either alone or in combination with fascial plication. The use of a graft for a primary anterior vaginal wall was not statistically different when comparing groups A and C (3% vs 10%; $p=0.82$) but was significant less when comparing group A to group B (3% vs 16%; $p=0.002$). For secondary redo anterior wall repairs, group A would use a graft either alone or in combination with fascial plication in 50%, group B in 58% and group C in 43%. The difference in the use of graft for secondary repairs was not statistically significant when comparing groups A and C or group A and B. The choice of procedure for treating concomitant anterior repair and USI was not statistically different in the three groups, and the midurethral tape in conjunction with an anterior midline plication repair was the procedure of choice. The Burch colposuspension was being performed by 5% in group A and 1% of group B, but none of the clinicians in Group C was performing the Burch. All three groups had a similar response when asked if they would operate on women who had not completed their family. This was not statistically different for the three groups (group A=47%, group B=45% and group C=56%). The change in surgical approach if the patient was not sexually active was also not different amongst the three groups (group A=18%; group B=24%; group C=23%).

Compared to 5 years ago, the greatest change in practice was in the uptake of graft in secondary repairs in all three groups and the associated increased use of synthetic graft with a corresponding decrease in the use of biological graft. The other significant difference was in the number of Burch procedures which had fallen dramatically since the previous survey in all three groups. In addition, this was being performed only by the specialists, i.e. group A and B, whereas 5 years ago, generalists were undertaking this procedure as well.

Uterovaginal wall prolapse

The second question assessed trends in the surgical management of second-degree uterine prolapse in conjunction with anterior vaginal wall prolapse. In women with uterovaginal prolapse, the procedure of choice was still a vaginal hysterectomy combined with a repair (82%) and had not changed from 5 years ago. Thirty-five percent of respondents would operate in women whose family was incomplete compared to 26% in the previous survey, and the procedure of choice was still a sacrohysteropexy (type I polypropylene mesh used to anchor the uterus to the sacrum). Results are given in Table 2.

Table 2 Question 2: uterine + vaginal wall prolapse (stage II)

		5 years ago	Current
Preoperative UDS if concurrent SUI	Yes: 70%	70%	59%
	No: 30%	30%	41%
Procedure of choice	Vaginal hysterectomy + repair	82%	82%
	Others	18%	18%
Method of vault support intra-operatively	Suturing uterosacrals to the vault	63%	56%
	McCall culdoplasty	13%	16%
	Sacrospinous	19%	20%
	Posterior IVS	1%	3%
	Others	4%	5%
Would the procedure change in women who are not sexually active.	Yes	6%	9%
	No	94%	91%
Management of women whose family is incomplete	Ring pessary	68%	58%
	Advise against pregnancy and vaginal hysterectomy+repair	2%	<1%
	Uterine preservation surgery	24%	34%
	Refer	6%	7%

When comparing surgical practice in the management of uterovaginal wall prolapse in the three groups, the rates of performing preoperative urodynamics (UDS) were similar in the three groups (group A=56%, group B=62% or group C=55%). The procedure of choice in the three groups was also similar with a vaginal hysterectomy and repair being the procedure of choice (group A=88%; group B=78%; group C=85%). The procedure of choice for supporting the vault was also similar in all three groups, i.e. suturing the uterosacral ligaments to the vault (group A=49%; group B=54%; group C=71%). None of the groups felt their procedure would change significantly in this scenario if the patient was not sexually active (group A=5%; group B=10%; group C=8%). Offering a ring pessary till the patient's family was complete would be adopted by all three groups (group A=63%; group B=54%; group C=62%). Uterine preservation surgery was offered by group A in 35%, group B in 39% and group C in 20% of cases.

Comparing the results to those from the previous survey, all responses were similar in the groups A, B and C except performance of uterine preservation surgery which was being done significantly less in the generalists, i.e. group C compared to group A or B.

Posterior vaginal wall prolapse

Question three assessed the surgical trends in the management of posterior vaginal wall prolapse. In women with posterior vaginal wall prolapse, the procedure of choice was posterior colporrhaphy with midline fascial plication in 66% of respondents. Twelve percent of respondents would use a graft for a primary posterior wall prolapse, and 49% would use a graft for a recurrent posterior wall prolapse. None of the results was significantly different to the results from 5 years ago. Though there was a marginal increase in the use of synthetic graft compared to biological graft, this change was not significantly different. Results are given in Table 3.

The referral for anorectal studies was not statistically different in the three groups (A=16%; B=16%; C=18%). The procedure of choice was similar in all three groups, i.e. posterior colporrhaphy with midline fascial plication (group A=63%; group B=62%%; group C=75%). For primary repairs, 20% of group A, 13% of group B and 2% of group C would use a graft alone or in combination with fascial plication. More significantly, group A would use a graft for primary repair compared to group C (20% vs 2%, $p<0.001$). However, there was no difference between groups A and B (20 vs 13%, $p=0.25$). For recurrent posterior vaginal wall prolapse, the procedure of choice was a graft-reinforced repair with or without fascial placation in group A (52%), group B (44%) and group C (45%) with no significant difference. The patient's sexual status did not alter the approach of surgery in the three groups (A=82%, B=85%; C=89%).

Compared to the survey 5 years ago, more generalists (group C) were performing graft reinforced surgery for recurrent prolapse, but other parameters remained unchanged.

Vaginal vault prolapse

Question four assessed the management of vaginal vault prolapse (VVP). Seventy-three percent of respondents would operate on a vault prolapse. Forty-three percent would perform UDS prior to surgery. The procedure of choice was an abdominal sacrocolpopexy (44%) where a

Table 3 Question 3: posterior vaginal wall prolapse

		5 years ago	Current
Procedure of choice	Posterior colporrhaphy	75%	66%
	Graft±fascial plication	9%	12%
		40% synthetic	45% synthetic
		60% biological	55% biological
	Site specific repair	11%	18%
	Others	5%	4%
Would colorectal opinion/anorectal studies be performed in the presence of defaecatory symptoms	Yes	15%	16%
	No	85%	84%
Procedure of choice for recurrent posterior wall prolapse	Posterior colporrhaphy	38%	23%
	Graft±fascial plication	49%	49%
		44% synthetic	53% synthetic
		56% biological	47% biological
	Site-specific repair	6%	14%
	Others	7%	14%
Would the procedure change if the patient is not sexually active	Yes	11%	14%
	No	89%	86%

type I polypropylene mesh is used to anchor the vaginal vault to the sacrum. When there was associated occult incontinence, 35% of respondents who would operate would perform an additional incontinence procedure at the time of surgery. Results are shown in Table 4.

The individual operative rates in the three groups were variable (group A=95%; group B=90%; group C=69%). The number of group A respondents who would operate was significantly greater than the numbers in group C who would operate (95% vs 69%; $p<0.001$), but no different to the number of group B respondents who would operate (95% vs 90%; $p=0.3$). Preoperative UDS in the three groups varied (group A=50%; group B=47%; group C=23%). This was statistically similar for group A and B but significantly greater in group A compared to group C (50% vs 23%; $p<0.001$). The procedure of choice in both group A (68%) and group B (44%) was an abdominal sacrocolpopexy (SCP). In group C, however, a SCP procedure accounted for 30% of the surgery performed by this group for VVP. This was significantly less than the respondents in group A performing these procedures (68% vs 30%; $p<0.001$). The preferred procedure for a VVP in group C was

Table 4 Question 4: vault prolapse

		5 years ago	Current
Refer or operate	Operate	66%	86%
	Refer	34%	14%
Preop UDS with no SUI symptoms	Yes	36%	43%
	No	64%	57%
Procedure of choice	Anterior +post repair	28%	20%
	Abdominal sacrocolpopexy +/- repair:	38%	44%
	SSF +/- repair	19%	26%
	Prespinous fixation +/- repair	1%	} 10%
	Posterior IVS +/- repair	6%	
	Uterosacral lig fixation + repair	3%	
	Others	5%	
Perform a continence op concomitantly for occult incontinence	Yes	54%	35%
	No	41%	62%
	Others	5%	3%
Would procedure of choice change if patient not sexually active[a]	Yes	16%	11%
	No	84%	89%

[a] Expressed as % of those who would operate

a sacrospinous/ileococcygeal fixation. Five years ago, the preferred procedure in this group was a standard repair. There were minimal variations in the three groups when comparing who would perform an anti-incontinence procedure at the time of prolapse surgery (group A=39%; group B=35%; group C=30%). This was not statistically different for group A and B or group A and C. The choice of procedure was not influenced by the patient's sexual status (group A=13%; group B=13%; group C=3%). This was not statistically different in the three groups.

Compared to 5 years ago, practice trends amongst the three groups remained unchanged for the management of vault prolapse, though more generalists were performing sacrospinous fixations than 5 years ago.

The method of classification used for prolapse varied. Most group A respondents (58%) and group B (41%) used the pelvic organ prolapse-quantitative assessment (POP-Q) [2] as the preferred criteria for classifying prolapse, but only 21% of group C were using the POP-Q. Use of the POP-Q was significantly more in group A when compared to group B (58% vs 41%; $p<0.01$) or group C (58% vs 21%; $p<0.0001$). There was an overall rise in the use of the POP-Q from the previous survey in both groups B and C but a fall in group A. Group C preferred to classify prolapse in degrees (first, second and third or procidentia).

Eighty-two percent of all respondents saw their patients back in gynaecology outpatients. This is a marginal fall from the previous survey (91%). This varied from 6 weeks to 6 months and occasionally longer. Group A followed up patients in 92% of cases, Group B in 83% and Group C in 72%.

Thirty-five percent of all respondents were using the BSUG database, but 65% were not using it. Use was significantly higher amongst group A (58%) when compared to group B (35%) or C (10%).

Discussion and conclusions

There are wide variations in the management of different types of prolapse. Overall, surgical practice in the management of pelvic organ prolapse has not altered dramatically in the past 5 years. The uptake of grafts has increased significantly in anterior compartment defects, and the rise was seen predominantly in patients with recurrent prolapse. There was also a significant reversal in the use of synthetic grafts with a corresponding decrease of biological grafts for the anterior compartment both in primary repairs and recurrent cases. Basic trends in prolapse surgery remain unchanged in the different groups of clinicians practising urogynaecology in the UK, i.e. the generalists, gynaecologists with a special interest, and the urogynaecologists. Unlike the previous survey, there was no obvious comparable trend when comparing the different management options amongst urogynaecologists, gynaecologists with a designated special interest in urogynaecology, and the general gynaecologists. In the UK, changes in the management of prolapse conform to the emerging evidence which is both reassuring and suggestive of conscientious practice.

The proportion of responses and the usable response rate (35%) were both better than in the previous national survey [1], even though overall responses were lower. Fewer questionnaires were sent out in this survey compared to the previous one. This might be because prolapse surgery is becoming more specialised hence explaining the smaller size of the Gynecare database from which the mailing list was obtained. This may also explain why fewer generalists and more urogynaecologists responded compared to the previous survey. The number of registered consultant members of the BSUG database is 229; hence, the response rate albeit small is still likely to be valid.

Following the introduction of graft use in pelvic organ prolapse (POP), there were initial concerns regarding the sudden increase in graft repairs for primary procedures particularly with the limited evidence. This does not appear to have happened, and it is reassuring that the increased uptake has been with secondary procedures in anterior compartment defects and in accordance with currently available evidence. It was also reassuring that the use of biological graft was falling particularly with a lack of evidence in their use [3]. The uptake for the posterior vaginal wall defects has remained unchanged and may be due to the lack of evidence of its benefit in the posterior vaginal wall prolapse [3]. The caution in the uptake of grafts could be related to the lack of long-term evidence of benefit, associated complications, particularly with trocar devices, and recommendations from NICE as well as the financial implications of using these devices on the NHS.

Specialised surgeries such as the Burch, sacrohysteropexy and sacrocolpopexy are being performed less frequently by the generalists than 5 years ago. Even amongst the specialists, the number of these procedures being performed is significantly less than in the past. It could be argued that these specialised procedures should therefore be performed in specialist centres or by those performing an ‘adequate’ volume of such surgery in non-tertiary centres to maintain skills and improve outcomes. Collecting data on complications and outcomes, by using such tools as the

BSUG database, is becoming increasingly important in this context.

The lower overall follow-up rate following prolapse surgery may be reflective of increasing pressures from the primary care trusts to keep follow-up patients in outpatients to a minimum. This is likely to fall further particularly with mounting pressures to maintain appropriate ratios of new to follow-up in clinics. The follow-up rates amongst the specialists (group A and B) compared to the previous survey may be stable because of the complex nature of procedure performed by them, hence the insistence by clinicians to see these patients for follow-up. A reduction in the follow-up has implications for monitoring of outcomes and problems with assessing success and satisfaction rates amongst patients particularly with this role being gradually delegated to primary care.

There is increasing use of the BSUG database which provides outcomes data and is a powerful audit tool for individual clinicians. In order for the database to provide denominator data however so that results can be meaningful in epidemiological studies, the uptake and use of the database need be much higher than the current rates of usage. This needs to be encouraged.

It was difficult to compare the results of this survey with practice in other countries as apart from a similar survey in Australia and New Zealand [4], there have not been similar surveys in other parts of the world to draw comparisons. There has been a survey in South Africa [5] comparing practice between the urogynaecologists and urologists; however, this was solely for anterior compartment defects. In the survey from South Africa, the preferred procedure for surgical correction of anterior vaginal wall prolapse was an anterior colporrhaphy, similar to the findings in our survey. In this survey, however, both paravaginal repair and graft repairs were more prevalent and being performed by 41.9% and 55.1%, respectively. This was significantly greater than in the UK survey. This survey did not look formally at the differences between primary and recurrent repairs. In addition, urologists were performing a significant proportion of the prolapse work for the anterior compartment which is not routine practice here in the UK.

Earlier this year, Vanspauwen et al. [4] published the results of their survey of Australian and New Zealand practitioners. This survey was based on the Initial National UK prolapse survey conducted 5 years ago using the same subset of questions and a similar analysis criteria. The commonest procedure for anterior repair in their survey was also an anterior colporrhaphy, but synthetic graft was being used by a significantly greater proportion of clinicians for secondary repair compared to the UK (75% vs 56%, $p<0.005$). For primary repair of the anterior compartment defect, results were not statistically significant. The management of uterovaginal prolapse and posterior vaginal wall prolapse was similar with no significant difference. For apical defects, the procedure of choice for vault prolapse was an abdominal approach in the UK with the sacrocolpopexy being the preferred operation, whereas in the Australian survey, the vaginal approach was preferred, and the commonest procedures were a sacrospinous fixation followed by a vaginal graft.

The management of prolapse has always been associated with discrepancy and variation. In the absence of robust RCT data, this is likely to continue. With a lifetime risk of 50% [6] for POP, high risk of recurrence [7] and a rising annual incidence of surgery for this condition, there is an urgent need to establish standards in the management of this condition. Collection of prospective data should be considered in which the operative and clinical details of women undergoing prolapse surgery both standard and with mesh/graft can be recorded. This may be feasible through the BSUG database; however, this requires greater uptake by clinicians so that sufficient efficacy and safety data can be gathered to guide the management in future. In addition, a need for adequately powered studies with sufficient follow-up is required to validate the efficacy of procedures before they are used.

Acknowledgements This survey was performed with the aid of an educational grant from Gynecare. We also wish to thank Marian Graham of Stewart Secretarial Services and statistician for Gynecare who analysed the data.

Conflicts of interest None.

Appendix 1

Given are four scenarios encountered in our daily practice. Please state how you would manage these cases from the options given. There are no right or wrong answers.

Case scenario I

Patient A, 45yr old sexually active woman presents with a symptomatic PV bulge associated with dragging discomfort during intercourse and minor urinary frequency. There is no history of incontinence. She is a para 2 (2 NVD) and is normally fit and well. O/E She has a grade 2 cystocoele (with both central and lateral defects) reaching the introitus on straining with no significant uterocervical or posterior wall prolapse (POP Q: Aa –1 cm, Ba 0 cm, C-6 cm, TVL 8 cm)

a) What would be your preferred surgical procedure in this scenario (please tick one)

1. Anterior colporrhaphy (midline plication) ☐

If YES: What suture would you use for plication.....

2. Graft reinforced anterior repair (no fascial plication) ☐

If YES: What graft would you use.....

3. Combination plication + graft overlay If YES: ☐

Which suture and graft would you use.....

.....

4. Paravaginal repair ☐

If YES, Which route? **P/V or P/A**

Which suture would you use?.....

5. Site specific defect posterior repair **Y/N**

6. Transobturator mesh kit ☐

If YES, which one…….

7. Other

If Yes What.....

b) If patient 'A' had associated stress incontinence, refractory to pelvic floor exercises and with confirmed Urodynamic Stress Incontinence (with no detrusor overactivity and normal voiding studies), what would be your preferred procedure(s)?

…….....

c) If patient 'A' presents 10yrs after her initial repair with prolapse recurrence and the same symptoms and findings (i.e recurrent grade 2 cystocoele with central and lateral defects and no incontinence);

Would you (tick 1 or 2)

1) operate ☐

2) refer to a designated 'urogynaecologist' or tertiary centre ☐

If you were to operate what would be your preferred procedure

Midline plication/ Graft alone/ Plication + Graft/ Paravaginal repair/ Mesh Kit/ Other…….

d) If patient 'A' was a 35yr old wishing to retain her potential to have more children:

Would you perform surgery if physiotherapy did not help and she was requesting surgical treatment? **Y/N**

If YES: What would be your procedure of choice

…….....

If you felt surgery was inappropriate, would you prefer to (tick 1 or 2)

1) advise her against further pregnancy and if she agrees proceed with surgical repair, ☐

or 2) advise her to complete her family first and then proceed with repair?

e) If patient 'A' was 75yrs old and not sexually active, would your surgical approach change? **Y/N** ☐

If YES; How

…….....

Case scenario II

Mrs B, a 65 year old (para 1), sexually active, fit and well woman with frequency, urgency and occasional urge leakage presents to you. She has no history of stress leakage. O/E grade 3 cystocoele, second degree uterocx prolapse with the cx descending to just reach the introitus on straining and no significant rectocoele. No stress leak on coughing, including with prolapse reduction. (Aa+1 cm, Ba +2 cm, C0cm, D-2 cm, TVL 9 cm, Ap-2 cm, Bp-2 cm, GH 4 cm, PL 2 cm)

a) Would you perform preoperative urodynamics (UDS) **Y/N**

b) Would you perform a Vaginal Hysterectomy with anterior repair (if UDS is normal) **Y/N**

If NO what procedure would you perform

.....

c) What technique would you employ intraoperatively to give some vaginal vault support :

- Suturing the uterosacrals to the vault
- McCall culdoplasty
- Sacrospinous fixation
- Mesh reinforcement. Which mesh/ Kit?.....
- Other?……..

d) Would your procedure change if this woman was not sexually active? **Y/N**

If YES: to what

.....

e) If Mrs B was 38yrs old and had symptomatic postnatal (past 1 year) prolapse despite physiotherapy (with the same examination findings), wanting further children your preferred option would be (tick options 1,2,3 or 4)

1) Do nothing and offer temporary ring pessary until family complete ☐
2) Advise against further pregnancy and offer surgery (hysterectomy +repair) ☐
3) Refer her to a urogynaecologist for another opinion ☐
4) Offer uterine preservation surgery ☐

If you have ticked option '4', your preferred choice of procedure would be

i) Manchester repair ☐
ii) Vaginal sacrospinous hysteropexy and repair(s) ☐
iii) Abdominal sacrocolpohysteropexy alone ☐
iv) Abdominal sacrocolpohysteropexy and Anterior Repair ☐
v) Infracoccygeal mesh to support uterus/cervix and repairs ☐
vi) Laparascopic uterosacral plication and paravaginal repair ☐
vii) Other; Which procedure?……

Case scenario III

Mrs C, 48 year sexually active woman presents with a symptomatic PV bulge associated with dragging, discomfort during intercourse and a sensation of incomplete rectal emptying occasionally needing Vaginal digitation. There is no history of flatal, faecal or urinary incontinence. She is a para 2 (NVD) and is normally fit and well. O/E She has a grade 2 (moderate) rectocoele reaching the introitus on straining with no significant uterocervical or anterior wall prolapse (POP Q Aa-3, Ba-3, C-6 cm,Ap 0 cm, Bp 0 cm, D-7 cm, TVL 8 cm, GH 3, PB 3)

a) Would you refer for a colorectal opinion/ano-rectal studies prior to offering her surgery? **Y/N**

b) Your preferred surgical procedure here would be-

1) Posterior colporrhaphy (midline plication) **Y/N**

If YES: What suture would you use? ……

2) Posterior repair using vaginal skin 'bridge' **Y/N**

3) Graft re-inforced posterior repair (no plication) **Y/N**

If YES: What would be your preferred graft?…….....

4) Combination plication + graft overlay **Y/N**

If YES: Which suture and graft preferred?…….

5) Site specific defect posterior repair **Y/N**

6) Ischiorectal fossa mesh kit

If YES, which one:…….

7) Others **Y/N**

If YES, What?…….....

c) If Mrs C presents at 58 yrs (10yrs later) with prolapse recurrence, and similar symptoms (i.e recurrent grade 2 rectocoele);

1) Would you

i) operate

ii) refer to designated specialist ('urogynaecologist')

2) If you would operate, which procedure would you offer from 1 to 7 (stem b) from above.....

d) Would your procedure change if she was sexually inactive **Y/N**

If YES, to what?……

Case scenario IV

Mrs 'D', 56 year old lady presents with a large, uncomfortable prolapse of 3 months duration. She has associated voiding difficulty with some frequency and urgency. She denies any history of incontinence. She is normally fit and well. She has a history of a TAH and BSO for menorrhagia at the age of 49 years. Until her recent symptoms she had been regularly sexually active.

On examination she has a grade 1 cystocoele, second degree (grade 2) vault descent reaching the introitus on straining with associated grade 2/3 rectoenterocoele. She had a hypermobile bladder neck and no demonstrable stress incontinence on provocation including with prolapse reduction. She requests surgical treatment. (POP-Q: Aa-1 cm, Ba 0 cm, C 0 cm, Bp+2 cm, Ap 0 cm, TVL 9 cm [good vaginal length and capacity], GH 4 cm, PL 2 cm).

a) Would you

1. refer to a designated urogynaecologist **Y/N**

2. operate **Y/N**

(If you would refer, move straight to the final section. If you would operate please complete the other stems b to g)

b) Would you perform pre-operative urodynamics in cases of vault/advanced vaginal wall prolapse in the absence of a history of incontinence? **Y/N**

c) Given the clinical scenario, what would be you preferred surgical approach? (tick option 1-6)

1) Anterior repair + Repair of Rectoenterocoele/perinorrhaphy ☐

i) If YES: Surgical technique for anterior wall

(Plication/Graft/Plication+Graft/Paravaginal repair/Other)

.....

ii) Surgical technique for posterior wall:

(Plication/Graft/Plication+Graft/Bridge repair/Other)

2) Would you perform any additional procedure with the repair such as sacrospinous fixation, iliococcygeal fixation, or uteroscaral ligament suspension? ☐

Y/N

If yes which would be your preferred option?

……...

3) Repair with Mesh reinforcement Y/N

If Yes which mesh/ Kit :……

4) Abdominal sacrocolpopexy alone ☐

If YES: Open / Laparoscopically

5) Abdominal Sacrocolpopexy plus low posterior repair (likely) (please complete 4) ☐

6) Other procedure(s):…… ☐

d) If preoperative urodynamic studies were performed and suggested the presence of urodynamic stress incontinence (i.e occult or potential USI in the absence of incontinence symptoms currently) with no voiding difficulty or detrusor overactivity: Would you

1) Proceed with surgery (as above) and warn the patient of the potential to develop postoperative USI and the possible need for an 'interval procedure'?

Y/N

2) Recommend an anti-incontinence procedure in addition to prolapse surgery?

If YES: What would now be your first choice procedures?

……

3) Other management……...

e) If Mrs 'D' in scenario IV is a 72 yr old and sexually active would your choice of surgical procedure change? **Y/N**

If YES: To what…….....

f) If Mrs 'D' in scenario IV is 72 yrs old and NOT sexually active would your choice of surgical procedure change? **Y/N**

If YES: To what……...

g) If 56 year old Mrs D had complete vaginal eversion (e.g POP-Q Aa+3cm, BA+8cm, C +8cm, Ap +3cm, Bp +8cm, TVL 8cm, GH 4cm, PL 2cm) what would be your preferred surgical procedure?

……

Final Section

1. Would you class yourself as:

Generalist / Gynaecologist with a designated special interest in urogynaecology / Urogynaecologist

2. How do you classify 'prolapse' in your routine NHS practice?

Small/medium/large ☐
Grade 1, 2 and 3 ☐
First, second, third and fourth degree (procidentia or complete eversion) ☐
Baden/Walker six point assessment ☐
POP-Q scoring/measurement ☐
Other:…….. ☐

3. Do you see patients for follow up who have undergone prolapse surgery? Y/N

If YES: At 6wks / 3 months / 6 months / Other……

4. **Do you use the BSUG database to audit the results of your surgery? Y/N**

☐ *Tick this box if you **DO NOT** agree to allow your anonymous data to be used for market research*

References

1. Jha S, Moran PA (2007) National survey on the management of prolapse in the UK. Neurourol Urodyn 26(3):325–331
2. Bump RC, Mattiasson A, Bo K, Brubaker LP, Delancey JO, Klarskov P et al (1996) The standardization of terminology of female pelvic organ prolapse and pelvic floor dysfunction. Am J Obstet Gynecol 175(1):10–17
3. Jia X, Glazener C, Mowatt G, MacLennan G, Bain C, Fraser C et al (2008) Efficacy and safety of using mesh or grafts in surgery for anterior and/or posterior vaginal wall prolapse: systematic review and meta-analysis. BJOG 115(11):1350–1361
4. Vanspauwen R, Seman E, Dwyer P (2010) Survey of current management of prolapse in Australia and New Zealand. Aust N Z J Obstet Gynaecol 50(3):262–267
5. Henn EW, van Rensburg JA, Cronje HS (2009) Management of anterior vaginal prolapse in South Africa: national survey. S Afr Med J 99(4):229–230
6. Samuelsson EC, Victor FT, Tibblin G, Svardsudd KF (1999) Signs of genital prolapse in a Swedish population of women 20 to 59 years of age and possible related factors. Am J Obstet Gynecol 180(2 Pt 1):299–305
7. Olsen AL, Smith VJ, Bergstrom JO, Colling JC, Clark AL (1997) Epidemiology of surgically managed pelvic organ prolapse and urinary incontinence. Obstet Gynecol 89(4):501–506