

Online supporting information

Table S1. Detail of enrolment in each centre.

Centre	Inclusions	Participation rate (enrolments/eligible surgeries)	Enrolment period (months)	Enrolments by month	Surgeons	Enrolments by surgeon (range)
A	425	99.1	31.5	13.5	17	25.0 (1 to 144)
B	386	93.0	32.1	12.0	9	43.0 (1 to 160)
C	330	67.8	25.8	12.8	13	25.4 (1 to 229)
D	203	44.9	26.4	7.7	15	13.5 (1 to 53)
E	201	98.5	30.5	6.6	3	67.0 (2 to 176)
F	151	94.2	33.3	4.5	12	12.6 (1 to 47)
G	115	99.1	28.7	4.0	4	28.8 (3 to 103)
H	110	93.1	30.3	3.6	2	55.0 (10 to 100)
I	98	58.8	6.9	14.2	7	14.0 (1 to 26)
J	90	74.4	32.2	2.8	5	18.0 (1 to 29)
K	59	38.1	17.2	3.4	3	19.7 (3 to 43)
L	40	87.0	5.3	7.6	3	13.3 (3 to 28)
M	34	73.9	17.3	2.0	7	4.9 (1 to 12)
N	27	88.2	5.0	5.4	4	6.8 (1 to 11)
O	16	53.3	14.5	1.1	1	16
P	9	m.d.	1.7	5.3	3	3.0 (1 to 6)
Q	9	81.8	2.3	3.9	1	9
R	3	m.d.	3.1	1.0	1	3
S	3	m.d.	0.5	6.5	2	1.5 (1 to 2)

m.d. = missing data

Table S2. Surgical procedures for pelvic organ prolapse (N= 2309).

Surgical procedures, n (%)		Vaginal repair N= 504	Transvaginal mesh N= 692	Laparoscopic sacropexy N= 1113
Anterior repair	with mesh	-	615 (88.9)	1046 (94.0)
	without mesh	227 (45.0)	20 (2.9)	7 (0.6)
Apical repair	with mesh	-	614 (88.7)	1048 (94.2)
	without mesh	322 (63.9)	58 (8.4)	9 (0.8)
Posterior repair	with mesh	-	94 (13.6)	699 (62.8)
	without mesh	333 (66.1)	295 (42.6)	26 (2.3)
Obliterative procedure (colpocleisis)		36 (7.1)	-	-
total hysterectomy		131 (26.0)	59 (8.5)	20 (1.8)
Concomitant procedures	subtotal hysterectomy	-	-	419 (37.6)
	Midurethral sling	102 (20.2)	69 (10.0)	152 (13.7)
	Burch colposuspension	-	-	56 (5.0)

Table S3. Risk factors for serious complication after POP surgery in women with preoperative anterior defect (N= 1836)

Risk factor		Non-weighted HR (95% CI)	Weighted* HR (95% CI)
Surgical group	Vaginal repair	1	1
	Transvaginal mesh	2.51 (0.90 to 6.98)	2.91 (1.79 to 4.77)
	Laparoscopic sacropexy	1.17 (0.39 to 3.53)	1.97 (1.10 to 3.52)
Concomitant procedure	Total hysterectomy	2.43 (1.05 to 5.64)	3.51 (2.23 to 5.52)
	Midurethral sling	1.28 (0.57 to 2.88)	0.95 (0.56 to 1.63)

HR = hazard ratio; CI = confidence interval.

\*Weights based on the propensity score which included age, body mass index, smoking, diabetes, surgical history (hysterectomy, or surgery for stress urinary incontinence or pelvic organ prolapse), physical status score (ASA), menopausal status, and anatomical defect.

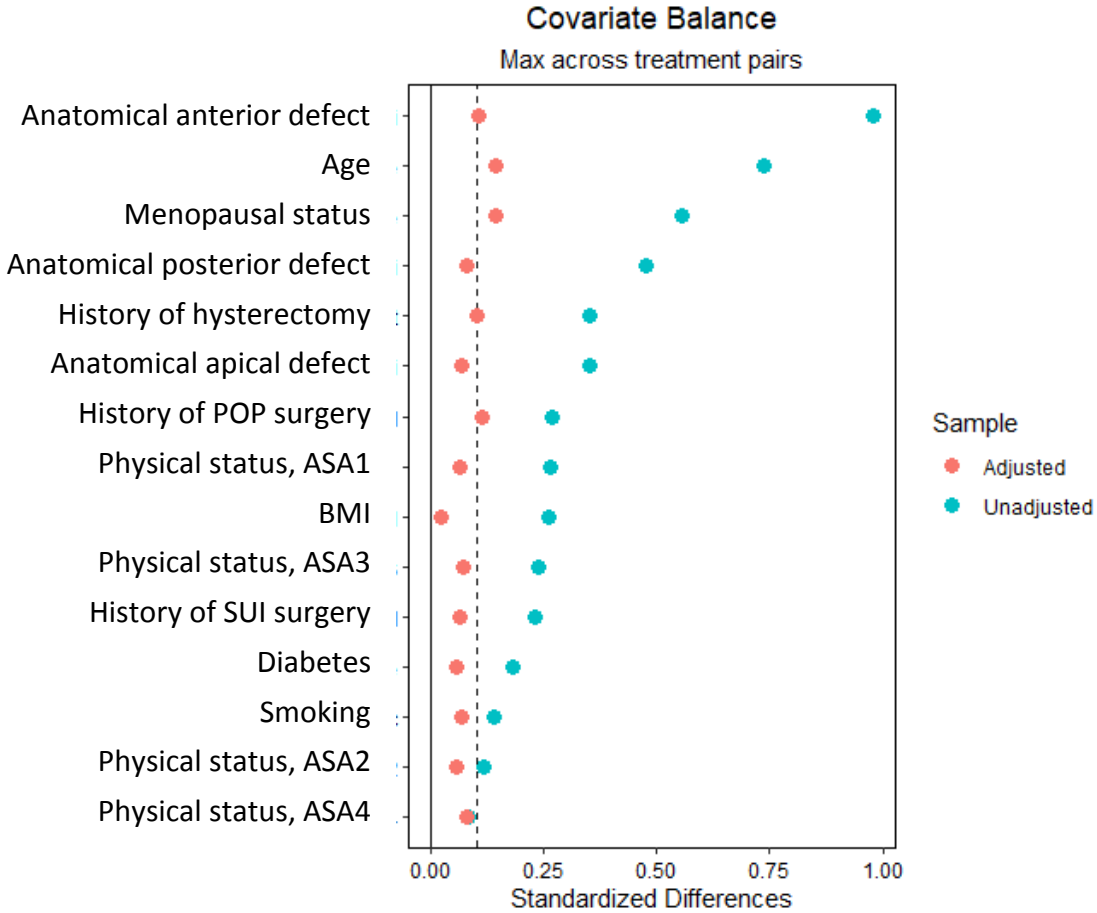
Table S4. Risk factors for reoperation for serious complication, prolapse recurrence, or stress urinary incontinence. Frailty model with centre as a random effect (N= 2309)

Risk factor		Non-weighted HR (95% CI)	Weighted* HR (95% CI)
Surgical group	Vaginal repair	1	1
	Transvaginal mesh	1.31 (0.78 to 2.21)	2.10 (1.53 to 2.89)
	Laparoscopic sacropexy	0.91 (0.54 to 1.53)	1.48 (1.05 to 2.08)
Concomitant procedure	Total hysterectomy	0.90 (0.47 to 1.74)	1.31 (0.94 to 1.84)
	Midurethral sling	0.80 (0.46 to 1.41)	0.78 (0.55 to 1.10)

HR = hazard ratio; CI = confidence interval.

\*Weights based on the propensity score which included age, body mass index, smoking, diabetes, surgical history (hysterectomy, or surgery for stress urinary incontinence or pelvic organ prolapse), physical status score (ASA), menopausal status, and anatomical defect.

Figure S1. Standardised differences between surgical groups before and after adjustment



ASA = American Society of Anaesthesiologists patient classification status; BMI = Body Mass Index; POP = Pelvic organ prolapse; MUS = midurethral sling.

Figure S2. Age distribution in each surgical group

