

Supplementary data

Table 4. Perioperative data expressed as mean (SD)

Factor	Conventional	PSPG	p-value ^a
Preoperative Hb (g/dL)	14.0 (1.5)	13.9 (1.2)	0.8
Postoperative Hb (g/dL)	11.7 (1.5)	11.3 (1.2)	0.2
Operation time (min)	106 (28)	101 (22)	0.3
Length of stay (days)	8 (4)	8 (3)	0.9

^a Two-independent samples t-test.

Table 5. KOOS preoperative and postoperative respectively at 3 months, 1 year, and 2 years. Values are mean (SD)

Factor	Conventional	PSPG	p-value ^a
Symptoms preoperative	46 (17)	51 (17)	0.6
3 months	62 (17)	69 (19)	
1 year	74 (17)	76 (19)	
2 years	78 (15)	82 (16)	
Pain preoperative	37 (17)	41 (19)	0.5
3 months	69 (21)	73 (20)	
1 year	79 (22)	81 (20)	
2 years	79 (21)	88 (16)	
ADL preoperative	44 (15)	46 (16)	0.7
3 months	73 (20)	76 (17)	
1 year	80 (21)	81 (18)	
2 years	78 (22)	85 (17)	
Sport/recreation preoperative	9 (11)	12 (13)	0.8
3 months	29 (22)	38 (25)	
1 year	40 (25)	45 (26)	
2 years	40 (29)	46 (24)	
QoL preoperative	21 (15)	24 (16)	0.6
3 months	57 (25)	64 (24)	
1 year	66 (25)	72 (27)	
2 years	66 (24)	76 (21)	

^a Multilevel linear mixed model.

Table 6. ROM preoperative and postoperative respectively at 3 months, 1 year, and 2 years. Values are mean (SD)

Factor	Conventional mean (SD) (95% CI)	PSPG mean (SD) (95% CI)	p-value ^a
Extension			
Preoperative	-2 (6) (-4.0 to -0.9)	-3 (4) (-4.2 to -1.6)	0.8
3 months	-2 (7) (-3.6 to 0.1)	-1 (5) (-2.7 to 0.1)	
1 year	0 (3) (-1.0 to 0.8)	-1 (4) (-2.0 to 0.6)	
2 years	-1 (4) (-1.8 to 0.3)	0 (2) (-1.2 to 0.4)	
Flexion			
Preoperative	112 (16) (107.7 to 116.7)	110 (14) (106.2 to 114.5)	0.1
3 months	106 (15) (101.4 to 110.2)	111 (13) (107.0 to 114.7)	
1 year	114 (11) (110.6 to 117.1)	115 (13) (110.6 to 118.8)	
2 years	115 (11) (112.1 to 118.4)	119 (12) (115.5 to 123.1)	

^a Multilevel linear mixed model.

Table 7. EQ5D-VAS preoperative and postoperative respectively at 3 months, 1 year, and 2 years

Factor	Conventional	PSPG	p-value ^a
Preoperative	57	59	0.7
3 months postoperative	69	72	
1 year postoperative	72	71	
2 years postoperative	75	77	

^a Multilevel linear mixed model.

Table 8. EQ5D-3L (descriptive system) preoperative and postoperative respectively at 3 months, 1 year, and 2 years expressed as percentages for no problem/problems

	Conventional	PSPG	p-value ^a
Mobility preoperative	6/94	7/93	1.0
3 months	48/52	50/50	
1 year	56/44	58/42	
2 years	63/37	63/37	
Self-care preoperative	72/28	70/30	0.2
3 months	92/8	93/7	
1 year	98/2	90/10	
2 years	98/2	90/10	
Usual activities preoperative	17/83	9/91	0.3
3 months	44/56	56/44	
1 year	53/47	55/45	
2 years	63/37	58/42	
Pain/discomfort preoperative	0/100	0/100	0.7
3 months	29/71	34/66	
1 year	51/49	48/52	
2 years	48/52	48/52	
Anxiety/depression preoperative	68/32	74/26	0.9
3 months	88/12	86/14	
1 year	81/19	88/12	
2 years	89/11	90/10	

^a Multilevel mixed-effects logistic regression.

Table 9. Pain NRS-11 preoperative and postoperative respectively at 3 months, 1 year, and 2 years

Factor	Conventional mean (SD) (95% CI)	PSPG mean (SD) (95% CI)	p-value ^a
Preoperative	5.9 (2.3) (5.2–6.5)	5.9 (2.5) (5.1–6.6)	0.2
3 months postoperative	2.9 (2.3) (2.3–3.6)	2.3 (1.9) (1.7–2.9)	
1 year postoperative	1.7 (2.1) (1.1–2.4)	1.5 (2.0) (0.9–2.1)	
2 years postoperative	2.3 (2.3) (1.6–3.0)	1.2 (1.9) (0.6–1.8)	

^a Multilevel linear mixed model.