

Supplementary Material

10.1302/0301-620X.103B5. BJJ-2020-1926.R1

Table i. Baseline characteristics of included studies.

Author	Participants, n	Tourniquet group, n	Control group, n	Mean age in tourniquet group, yrs (SD)	Mean age in control group, yrs (SD)	Proportion of males in tourniquet group (%)	Proportion of males in control group (%)	Mean BMI in tourniquet group, kg/m ² (SD)	Mean BMI in control group, kg/m ² (SD)
Abdel-Salem 1995	80	40	40	73	73				
Aglietti 2000	20	10	10	70 (8)	68 (4.5)	30	40	27.9	27.3
Alexandersson 2018	81	38	43	68 (7.4)	69.7 (6.4)	47	51	28.6 (3.4)	27.9 (3.5)
Ayik 2020	65	32	33	65.39 (7.25)	64.90 (6.58)	44	42	31.38 (4.72)	30.3 (7.1)
Clarke 2001	31	21	10						
Dong 2019	122	58	64	68.2 (17.1)	69.5 (15.9)	34	35		
Ejaz 2014	64	33	31	68 (8.4)	68 (7.4)	55	55	25 (2)	25 (2.5)
Ejaz 2015	62	31	31	68 (6.3)	68.2 (7.2)	52	55	25.1 (2)	25.2 (2.5)
Ejaz 2015 b	57	29	28	68.3 (8.4)	68.2 (7.8)	45	54	25.1 (2)	25.2 (2.5)
Goel 2019	199	100	99	66.0 (7.0)	65.5 (7.8)	50	48	30.9 (4.6)	31.3 (4.5)
Harston 2015	64	32	32	68 (8)	66 (8)			27.4	28.4
Huang 2017	100	50	50	66.2 (8.3)	65.1 (8.1)	36	32	25.1 (1.5)	24.2 (1.5)
Jawhar 2015	34	17	17	70.6 (6)	70.6 (6)	53	53	32.1 (5)	33.8 (5)
Jawhar 2019	99	50	49	69.3 (7.4)	68.3 ± 7.8	34	39	31.9 (6)	31.4 (5.5)
Juelsgaard 2001	30	16	14	69	64	44	29		
Kato 2002	46	22	24	65	63				
Kiss 2015	100	51	49	72.6 (7.1)	74.7 (7.4)	20	27	28.8 (3.9)	28.5 (3.3)
Kumar 2015	30	30	30	58	58	30	30		

Ledin 2012	50	25	25	70 (8)	71 (6)	67	39	29 (4.8)	28 (4.8)
Li 2008	60	30	30	71 (7)	70 (7)			24 (5)	24 (5)
Li 2009	80	40	40	71 (6)	70 (7)	28	33	27.3 (6.3)	26.8 (5.1)
Liu 2014	20	10	10	67	60	70	90	25.5	28.7
Liu 2017	52	52	52	67 (8)	67 (8)			28.1 (5.5)	28.1 (5.5)
Liu 2017 b	26	26	26	65.8 (9.2)	65.8 (9.2)	35	35	28.2 (5.6)	28.2 (5.6)
Matziolis 2015	20	10	10	72.4	76.6	80	70	28.3	29.5
Molt 2014	60	30	30	70 (7)	67 (9)	53	53	28 (3)	28 (3)
Mori 2016	103	51	52	72.8 (7.3)	74.6 (7.6)	12	17	27.7 (3.4)	29.2 (3.9)
Ozkunt 018	49	24	25	65.05	65.05				
Pfitzner 2014	90	45	45	69.3	70.5	47	24	27.8	26
Tai 2012	72	36	36	72.1 (6.9)	71.5 (6.8)			28.6 (4.5)	27.9 (4.2)
Tetro 2001	63	33	30	69.8 (6.7)	69.8 (9)	45	37		
Vandenbussche 2001	80	40	40	72.5	68.5	22.5	40		
Vertullo 2017	40	20	20	67.85 (6.91)	65.65 (8.54)	50	55	30.43 (5.07)	31 (5.31)
Wakankar 1999	77	37	40	72.5	71.8	30	35		
Wauke 2002	37	19	18	63.2 (8.7)	61.4 (7.4)				
Wu 2018	100	50	50	68.06 (3.16)	67.58 (4.61)	38	44	23.87 (2.13)	24.10 (2.16)
Yavarika 2010	51	22	29	68	66	27	24		
Zhang 2010	60	30	30	72 (6)	71 (6)	27	37	25 (4)	26 (4)
Zhang 2016	166	84	82	84	82				
Zhou 2011	39	20	19	63.12 (6.79)	61.89 (7.93)	35	26		
Zhou 2017	140	72	68	72	68	18	10	26.1 (4.,1)	25.7 (3.4)

Search strategy

Database: EBM Reviews - Cochrane Central Register of Controlled Trials <February 2020>

- 1 arthroplasty, replacement, knee/ (2397)
- 2 knee Prosthesis/ (695)
- 3 Tkr.ti,ab. (611)
- 4 exp knee/ (757)
- 5 Knee.ti,ab. (26815)
- 6 4 or 5 (26892)
- 7 exp arthroplasty/ (4793)
- 8 joint prosthesis/ (152)
- 9 (arthroplast\$ or prosthe\$ or replac\$).ti,ab. (44454)
- 10 or/7-9 (45239)
- 11 6 and 10 (8683)
- 12 or/1-3,11 (8836)
- 13 exp tourniquet/ (502)
- 14 Tourniquet.ti,ab. (1777)
- 15 Esmarch.ti,ab. (39)
- 16 Lofquist.ti,ab. (1)
- 17 Cuff.ti,ab. (4665)
- 18 or/13-17 (6389)
- 19 12 and 18 (539)

Database: Ovid MEDLINE(R) ALL <1946 to March 26, 2020>

- 1 arthroplasty, replacement, knee/ (23209)
- 2 knee Prosthesis/ (11497)
- 3 Tkr.ti,ab. (1965)

4 exp knee/ (14079)
5 Knee.ti,ab. (136670)
6 4 or 5 (141363)
7 exp arthroplasty/ (67501)
8 joint prosthesis/ (10183)
9 (arthroplast\$ or prosthe\$ or replac\$).ti,ab. (553274)
10 or/7-9 (570385)
11 6 and 10 (43440)
12 or/1-3,11 (47102)
13 exp tourniquet/ (3806)
14 Tourniquet.ti,ab. (5763)
15 Esmarch.ti,ab. (143)
16 Lofquist.ti,ab. (5)
17 Cuff.ti,ab. (26604)
18 or/13-17 (33350)
19 12 and 18 (945)
20 randomized controlled trial.pt. (502716)
21 controlled clinical trial.pt. (93585)
22 randomized.ab. (474264)
23 placebo.ab. (206347)
24 clinical trials as topic.sh. (190551)
25 randomly.ab. (329990)
26 trial.ti. (215554)
27 or/20-26 (1277741)
28 exp animals/ not humans.sh. (4683296)
29 27 not 28 (1175436)
30 19 and 29 (340)

Database: Embase <1974 to 2020 March 27>

1 knee arthroplasty/ (15292)

2 knee prosthesis/ (8310)

3 total knee replacement/ (20943)

4 (knee adj3 (arthroplast\$ or replac\$ or prosthe\$)).ti,ab. (41589)

5 or/1-4 (50915)

6 exp tourniquet/ (6272)

7 tourniquet\$.ti,ab. (7325)

8 Esmarch.ti,ab. (157)

9 Lofquist.ti,ab. (8)

10 Cuff.ti,ab. (36952)

11 or/6-10 (45707)

12 5 and 11 (1189)

13 random\$.tw. (1517280)

14 factorial\$.tw. (37582)

15 crossover\$.tw. (74987)

16 cross over.tw. (31934)

17 cross-over.tw. (31934)

18 placebo\$.tw. (305092)

19 (doubl\$ adj blind\$).tw. (207633)

20 (singl\$ adj blind\$).tw. (24601)

21 assign\$.tw. (389504)

22 allocat\$.tw. (150203)

23 volunteer\$.tw. (254706)

24 crossover procedure/ (62618)

25 double blind procedure/ (170919)

26 randomized controlled trial/ (596807)

27 single blind procedure/ (38387)

28 or/13-27 (2300219)

29 12 and 28 (411)