

## Supplementary article data

# Factors that can predict pain with walking, 12 months after total knee arthroplasty

## A trajectory analysis of 202 patients

Maren Falch LINDBERG <sup>1,2</sup>, Christine MIASKOWSKI <sup>3</sup>, Tone RUSTØEN <sup>2,4</sup>, Leiv Arne ROSSELAND <sup>4,5</sup>, Bruce A COOPER <sup>3</sup>, and Anners LERDAL <sup>1,2</sup>

<sup>1</sup> Department of Surgery, Lovisenberg Diakonale Hospital, Oslo; <sup>2</sup> Department of Nursing Science, Institute of Health and Society, Faculty of Medicine, University of Oslo, Oslo, Norway; <sup>3</sup> School of Nursing, University of California, San Francisco, CA, USA; <sup>4</sup> Department of Research and Development, Division of Emergencies and Critical Care, Oslo University Hospital, Oslo, Norway; <sup>5</sup> Institute of Clinical Medicine, University of Oslo, Oslo, Norway.  
Correspondence: m.k.f.lindberg@medisin.uio.no  
Submitted 2016-03-26. Accepted 2016-07-30.

Table 3. Differences in demographic and clinical characteristics between the Recurrent Interference and Continuous Improvement classes based on an evaluation of pain-related interference with walking

	Recurrent Interference <sup>a</sup> (n = 45)	Continuous Improvement <sup>a</sup> (n = 157)	Statistics		
			p-value	95% CI	Effect size
<b>Demographic characteristics</b>					
Age, years	67 (11)	68 (9)	0.6	-2.5 to 4.6	0.11 <sup>b</sup>
Men, % (n)	33 (15)	31 (49)	0.8	-0.13 to 0.17	-0.02 <sup>c</sup>
Women, % (n)	67 (30)	69 (108)			
Lives with partner, % (n)	62 (28)	60 (94)	0.8	-0.14 to 0.19	-0.02 <sup>c</sup>
Lives alone, % (n)	38 (17)	40 (63)			
Paid work, % (n)	40 (18)	34 (54)	0.5	-0.11 to 0.22	-0.05 <sup>c</sup>
No paid work, % (n)	60 (27)	66 (103)			
Higher education, % (n)	51 (23)	51 (79)	1.0	-0.16 to 0.17	-0.002 <sup>c</sup>
Lower education, % (n)	49 (22)	49 (75)			
<b>Preoperative clinical characteristics</b>					
BMI	30 (5.5)	29 (4.5)	0.09	-3.0 to 0.2	0.29 <sup>b</sup>
C-reactive protein, mg/L	3.9 (3.1)	3.1 (2.9)	0.1	-1.8 to 0.3	0.27 <sup>b</sup>
Number of comorbidities	1.3 (1.1)	1.1 (0.9)	0.06	0.06 to 0.07	0.20 <sup>b</sup>
ASA score	2.1 (0.5)	2.0 (0.5)	0.2	0.17 to 0.18	0.21 <sup>b</sup>

<sup>a</sup> Values are mean (SD) unless otherwise stated

<sup>b</sup> Cohen's *d* effect sizes: Small  $\geq 0.2$ ; Medium  $\geq 0.5$ ; Large  $\geq 0.8$ .

<sup>c</sup> Phi effect sizes: Small  $\geq 0.1$ ; Medium  $\geq 0.3$ ; Large  $\geq 0.5$ .

ASA: American Society of Anesthesiologists.

Table 4. Differences in pain characteristics and perioperative characteristics between the Recurrent Interference and Continuous Improvement classes based on an evaluation of pain-related interference with walking

	Recurrent Interference <sup>a</sup> (n = 45)	Continuous Improvement <sup>a</sup> (n = 157)	Statistics p-value	95% CI	Effect size
<b>Pain characteristics</b>					
Average pain prior to surgery	5.9 (1.5)	5.1 (1.8)	0.005	-1.4 to -0.4	0.47 <sup>b</sup>
Worst pain prior to surgery	6.5 (1.7)	5.2 (2.1)	< 0.001	-2.0 to -0.6	0.62 <sup>b</sup>
Total pain interference prior to surgery	5.5 (1.9)	4.1 (1.9)	< 0.001	-2.0 to -0.8	0.71 <sup>b</sup>
Number of painful sites prior to surgery	2.9 (2.2)	1.9 (1.5)	0.003	0.001 to 0.003	0.43 <sup>b</sup>
Number of painful sites 12 months after surgery	2.4 (1.3)	1.8 (1.1)	0.02	0.014 to 0.019	0.34 <sup>b</sup>
Contralateral knee pain 12 months after surgery					
No, % (n)	70 (33)	73 (77)			
Yes, % (n)	30 (14)	27 (29)	0.8	-0.19 to 0.14	0.025 <sup>c</sup>
<b>Perioperative characteristics</b>					
Side of surgery					
Left knee, % (n)	47 (21)	49 (77)			
Right knee, % (n)	53 (24)	51 (80)	0.8	-0.19 to 0.14	0.02 <sup>c</sup>
Type of anesthesia					
Regional, % (n)	76 (34)	90 (141)			
Total intravenous, % (n)	24 (11)	10 (16)	0.01	-0.28 to -0.008	0.17 <sup>c</sup>
Length of surgery, min	66 (15)	65 (13)	0.7	-5.5 to 3.6	0.07 <sup>b</sup>
Number of days with epidural analgesia	1.5 (1.0)	1.8 (0.7)	0.10	0.09 to 0.10	0.37 <sup>b</sup>
Number of days with continuous femoral block	0.7 (1.0)	0.2 (0.7)	< 0.001	< 0.001 to < 0.001	0.54 <sup>b</sup>
Number of days with ketamine	0.4 (0.7)	0.1 (0.4)	0.02	0.014 to 0.019	0.33 <sup>b</sup>
Average dose of opioids over 4 days	15.7 (10.1)	12.3 (6)	0.006	-5.8 to -1.0	0.25 <sup>b</sup>

<sup>a</sup> Values are mean (SD) unless otherwise stated

<sup>b</sup> Cohen's *d* effect sizes: Small  $\geq 0.2$ ; Medium  $\geq 0.5$ ; Large  $\geq 0.8$ .

<sup>c</sup> Phi effect sizes: Small  $\geq 0.1$ ; Medium  $\geq 0.3$ ; Large  $\geq 0.5$ .