

Post Discharge Pain Follow-up in Elective Primary Total Knee/ Total Hip Arthroplasty Patients Discharged to Home on Day 5 or Earlier from the Holland Orthopaedic & Arthritic Centre/SHSC

Introduction & Purpose

The purpose of the study was: (1) To determine pain scores of the patients who had primary TKA/THA following discharge from the acute care facility to home on Day 5 or less; (2) Assess what level of pain scores was found to be satisfactory by the patients; (3) Assess the number of prescribed analgesic tablets taken in 5 days; (4) Assess the association between pain score and the number of tablets controlling for age and gender.

Inclusion criteria: Age 18 years or older for a Unilateral Primary Elective TKA/THA, able to speak, read and understand English and were discharged to home on POD#5 or earlier.

Exclusion criteria: History of chronic pain or cognitive impairment.

Method

Patients were introduced to the study and informed consent was obtained on Day 3 following surgery. Patients were asked to complete the Pain Self Assessment Form (PSAF) which included a measurement tool to assess pain intensity at home following discharge from hospital. Pain scores were measured 3 times/day and an average daily pain score for 5 days following discharge to home. As well, patients were asked to document the number of tablets of pain medicine they took daily and to document any side effects from the pain medicine on the PSAF. Follow-up phone calls were made on Day 3 and Day 6 to remind the patients to mail back the PSAF in the stamped, addressed envelope provided.

• PAIN SELF ASSESSMENT FORM

DATE: _____ ANALGESIC PRESCRIBED: Percocet: _____ Tylenol#3: _____ Other: _____

#1: _____

GENDER: _____

AGE: _____

PROCEDURE: _____

TIME	DAY1		DAY2		DAY3		DAY4		DAY5	
	PAIN LEVEL		PAIN LEVEL		PAIN LEVEL		PAIN LEVEL		PAIN LEVEL	
8:00										
14:00										
20:00										
TOTAL TABLETS TAKEN DAILY										
DAILY AVERAGE PAIN LEVEL										

0 NO PAIN ————— 5 ————— 10 WORST PAIN

Is pain level Satisfactory? Yes No

DAY 1	Yes	No
DAY 2		
DAY 3		
DAY 4		
DAY 5		

Comments: _____

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Results

113 patients met the inclusion/exclusion criteria and consented. 15 patients were taken off the study due to delayed discharge to home. Of the 98 patients who consented and went home on Day 5 or less, 85 patients responded for a response rate of 87.7%.

Analysis of data was coded into 4 categories: Left Total Hip Arthroplasty (Lt. THA), Left Total Knee Arthroplasty (Lt. TKA), Right Total Hip Arthroplasty (Rt. THA) and Right Total Knee Arthroplasty (Rt. TKA). Average pain scores were calculated for categories of patients over the 5-day period.

Pain Scores & Satisfaction

- Participants satisfaction with an average pain score are as follows:

Satisfied	Not satisfied
Lt THA 3.2 or <	5.0 or >
Rt THA 3.3 or <	4.9 or >
Lt TKA 2.7 or <	5.4 or >
Rt TKA 3.9 or <	6.1 or >
69.1 % were satisfied with their pain level during the first 5 days upon discharge	

	PAIN SCORES AND AMOUNT OF PAIN MEDICINE			
	Lt THA	Rt THA	Lt TKA	Rt TKA
Mean Pain Score (0-10) POD 6-10	3.6	3.7	3.5	4.4
Average # of Percocet® taken per day	4.5	6.8	5.1	7.8
Average # of Tylenol #3® taken per day	3.8	4.6	5.1	4.1

Statistical Significance

Participants who had surgery on their left side had reported less pain than participants who had surgery on their right side, with participants who had rt TKA reporting the highest pain scores (4.4/10).

- Participants with Lt THA had lower pain scores than those with rt TKA ($p=0.02$) and took less pain medicine ($p=0.0001$)
- Participants with Lt TKA had lower pain scores than those with rt TKA ($p=0.009$) and took less pain medicine ($p=0.0002$)
- Participants with rt THA had lower pain scores than rt TKA participants but this was not significant ($p=0.07$) and they took less pain medicine ($p=0.04$)
- Participants with Lt THA had less pain than rt THA participants and took less pain medicine than rt THA participants ($p=0.02$)

Pain Score And Amount Of Pain Medicine, Controlling For Age And Gender

- Participants younger than 65 years had an average daily pain score of 3.6 and used more analgesics conversely
- Participants older than 65, had an average daily pain score of 4.1 and took less analgesics
- Female participants were less satisfied with their pain control than male participants and used more pain medicine

Conclusion

This study provides initial data regarding the pain management of TKA/THA patients post discharge. Average pain scores in the first 5 days range from 3.5 to 4.4/10, relative to the type of surgery. Patient satisfaction and amount of pain medicine taken varied based on type of surgery, surgical side. Participants who had rt TKA experienced more pain and used more pain medicine than other participants. Participants over the age of 65 took less pain medicine but had higher pain scores than participants younger than 65. Female participants were less satisfied with their pain control but took more pain medicine. The most commonly reported adverse effects were constipation and nausea.

Providing patients with adequate discharge information regarding how to take pain medicine and how to manage side effects may improve pain control.



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