



CHAPTER IV

RESULTS

From December 2006 to November 2008, 142 cases of the total knee arthroplasty were evaluated in 142 patients. There were knee osteoarthritis which they didn't responded to standard conservative treatment.

4.1 Base line data

Table 4.1 Descriptive baseline data in non-cast and cast groups.

	Cast n = 69	Non- Cast n = 73
Sex		
Male	5 (7.2%)	6 (8.2%)
Female	64 (92.8%)	67 (91.8%)
Male : Female	1 : 12.8	1 : 11.2
Age		
Mean (SD)	68 (8.3)	69.3 (7.4)
Median	67	70
Min	46	50
Max	90	84
Weight(kg)		
Mean (SD)	65.08 (10.5)	65.5 (10.4)
Height (m)		
Mean (SD)	1.55 (0.1)	1.54 (0.1)
BMI(Body Mass Index) (Kg/m ²)		
Mean (SD)	26.7 (3.9)	27.3 (4.2)
Min	20.44	18.61
Max	37.33	39.26
Side of TKA		
Right	33 (47.8%)	41 (56.2%)
Left	36 (52.2%)	32 (43.8%)

The baseline characteristics of the two groups were comparable. (table 4.1) The age was ranged from 46-90 years old in TKA with cast group and age ranged from 50-84 years old in non-cast group. The mean and SD of the BMI in non-cast group was 27.3 (4.2) kg/m² and in cast group was 26.7 (3.9) kg/m². The knee side that was operated in non-cast group was 41 knees on the right and 32 knees on the left. The knee side that was operated in cast group was 33 knees on the right and 36 knees on the left.

Table 4.2 Postoperative blood drained in ml after TKA

	Cast n =69	Non Cast n = 73
Mean	324.7	546.85
SD	129.3	122.2
Min	60	300
Max	640	960

Mean difference (95% CI) = -222.14(-263.8,-180.4), $p < .05$

The blood loss from wound drained in TKA was measured. The mean (SD) of blood loss in non- cast group was 546.8 (122.2) ml and in cast group was 324.7 (129.3) ml (table 4.2). The mean difference (95% CI) in blood loss between cast and non-cast groups was -222.14 (-180.39,-263.8). Using unpaired t-test, there was a significant difference of wound drained in ml. between non-cast and cast group, $p < .05$.

Table 4.3 Postoperative knee range of motion in degree after 8 weeks

	Cast n = 69	Non Cast n = 73
Mean	108.4	102.2
SD	9.8	9.3
Min	90	90
Max	120	120

Mean difference (95% CI) = 6.2(3.0,9.4), $p < 0.05$

The knee motion after 8 weeks post TKA were recorded in mean(SD) degree. In non-cast group was 102.2 (9.3) degree and in cast group was 108.4 (9.8) degree. The mean difference of knee motion in both groups (95% CI) was 6.2 (9.4,3). Using unpaired t-test, there was a significant difference in knee range of motion between non-cast and cast group, $p < 0.05$. (table 4.3)

Table 4.4 Postoperative wound complication after TKA

	Cast	Non Cast
Yes	0	2
No	69	71
total	60	73

There was no wound complication in cast group but there was 2 cases in non-cast group. Using Fisher's Exact test, there was no statistical difference of wound complication between cast and non-cast group, ($p = .497$). (table 4.4)