



## Service Priorities and Programmes Electronic Presentations

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### **Fast- Track Rehabilitation Enhances Recovery After Total Knee replacement**

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#### **Keywords:**

Fast-Track Rehabilitation

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#### **Introduction**

Fast-track rehabilitation is universally accepted as a standard management of total knee replacement (TKR). The very essence of this service is multidisciplinary standardized perioperative care aiming at accelerating recovery through early mobilization for reduction of hospital stay. The Fast Track Rehabilitation Pathway has first been launched in Orthopaedic and Traumatology Department in United Christian Hospital since 2013. Enhancement of FTR has been done in Apr 2016 with major improvement including multidisciplinary perioperative educational talk, procedure specific analgesic protocol, as well as round-the-year post-operative mobilization starting at Day 1 by physiotherapy.

#### **Objectives**

To compare the clinical outcomes of patients with primary post-operative total knee replacement before and after the Enhanced Fast-Track Rehabilitation Pathway (EFTR).

#### **Methodology**

The study included 28 patients with primary TKR during the pre-EFTR period from Jun –Sept 2013 and 42 patients with primary TKR during the post-EFTR period from Jun-Sept 2016. Demographic data, post-op day for first walk, subjective pain in Numerical Pain Rating Scale, knee flexion range of motion (ROM) by standard goniometry on Day 1, Day 3 and Day 8 respectively after operation were recorded. Data was collected and analyzed using appropriated statistical methods while a p-value of <0.05 was considered significant.

#### **Result**

A significant reduction of length of hospital stay was found following the EFTR (11.11 V 9.26; p <0.05). Mean of post-op day of first walk was significant enhanced from Day 2.57 to Day 1.19 (p <0.05). There was a significant improvement in the knee flexion ROM in D1 post-op (38.57 V 63.57, p<0.05) and in D3 post-op (76.25 V 82.50; p<0.05). Pain scale (p>.05) however, didn't show a statistical significant improvement.

#### **Conclusion**

The EFTR was effective in accelerating recovery after total knee replacement through

early mobilization as medical condition tolerated. Reduction in the length of hospital stay as the primary gain and ROM of the operated knee were achieved.