

# Service Priorities and Programmes Electronic Presentations

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Routine Drain after Total Knee Replacement: Preventing or Inviting Trouble? MAK Suk-Ying, NG Wang-Lin, Lau Chun-Man, Hung Yuk-Wah, LEUNG Man-Fung, LAM Wai-Him, KWOK Ka-Bon, Wong Siu-Wan, Lo Ka-Man, CHU Wing-Shan, Fan Chi-Ho

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### **Keywords:**

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#### Introduction

Suction-drain is commonly used following TKR to prevent hematoma collection and deep surgical site infection. However, this practice mightnot only carry risks for increased post-operative blood loss and need of transfusion, this pose risk for retaining foreign body. With advancement of blood management in TKR, the role of suction-drain is becoming more of a question. Studies have shown that patients could be benefited by not having a suction drain after TKA as it safely avoids drain-related complications, reduces post-operative blood loss and accelerates rehabilitation. Since January 2017, suction-drain is no longer routinely use in Alice Ho Miu Ling Nethersole Hospital (AHNH).

## **Objectives**

To compare surgical outcomes of patients with and without suction drain after TKA.

## **Methodology**

Single Centre retrospective cohort study. Operations were done under same surgical team with standardized protocol. All patients who underwent TKA at AHNH from October 2015 (establishment of joint center) to October 2017 were included. Suction-drain is only used in patients who have bleeding tendency, failed water seal repair of arthrotomy or complex operation(e.g. revision surgery and complex reconstruction). Drain status and surgical outcomes were reviewed.

#### Result

Results: A total number of 560 cases of TKA had been performed at AHNH during the study period. 326 cases from October 2015 to December 2016 and 234 cases from January 2017 to October 2017. 24 and 191 patients had TKA without drain from October 2015 to December 2016 and January to October 2017 respectively. There is no significant difference in terms of mean hemoglobin drop, transfusion rate and length of hospital stay between the "drain" and "without drain" groups. There was no

retained drain particles and joint infection recorded. Conclusions: With appropriate case selection, practice of routine suction-drain after TKA can be abandoned without inferior surgical outcomes. And most importantly, this can definite reduce drain related complication which could be potential cuprite for sentinel event.