

#### **Service Priorities and Programmes**

#### **Electronic Presentations**

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## Continuous Quality Improvement Program -- Reduction of Wound Infection Rate for Patients undergone Emergency operation in Surgical Department

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## Keywords:

CQI program to reduce wound infetion rate for patients who have undergone emergency operation in Dept. of Surgery YCH

## **Introduction**

Pre and Post operative care plays an important role in promoting wound healing for patients with emergency surgery. Surgical wound infection is a major obstacle that delays patients' recovery, prolongs their hospital stay and affects their quality of life. Adverse effects associated with surgical wound infection include significant increase in postoperative morbidity, mortality and length of stay, which not only extends patients' suffering and pain but also causes unnecessary increase in health care cost. In order to reduce wound infection rate for patients who have undergone emergency operation, a continuous quality improvement (CQI) program has been launched in the Department of Surgery of Yan Chai Hospital since 2011.

# **Objectives**

To ensure safe surgical outcome and to reduce the rate of wound infection for patients who have undergone emergency operation in department of surgery.

### **Methodology**

A CQI team was formed in April 2011 with members including Consultant, Ward Managers, APNs, RNs and nurses from infection control team. Meetings were held to discuss the areas for improvement. Wound infection rate from April 2010 to March 2011 was presented to team members. Major emergency operations with high surgical wound infection rate such as Appendectomy, Cholecystectomy and Colon surgery were to be monitored. A continuous quality improvement program was implemented which included constructive solutions and strategies as follows: (1) improve personal and environmental hygiene; (2) review technique of hand hygiene and wound dressing; (3) designated and cleansing of equipment; (4) improve the preparation of patients who would undergo emergency operation; (5) refine surgical techniques of surgeons; (6) use prophylactic preoperative antibiotics.

### **Result**

Year 2Q 2010 to 1Q 2011 Operation No of procedures No of infected cases

Appendicetomy 261 15 Cholecystectomy 89 6 Colon 49 14 Year 2Q 2011 to 1Q 2012 Operation No of procedures No of infected cases Appendicetomy 263 10 Cholecystectomy 90 4 Colon 44 11 Based on the results, surgical wound infection rate of emergency operation have shown obvious reducing trend, though that of Colon surgery is not marked, after the implementation of quality improvement program since April 2011. Conclusion By consolidating the basics and reinforcing some special areas of pre and post-operative care in our continuous quality improvement program, the outcomes of the emergency surgery were encouraging. The results have demonstrated a trend of reduction in wound infection rate for patients who have undergone emergency operation in department of surgery. Continuous monitoring and review of this program is necessary to maintain high standard of nursing care to the patients in surgical department.