



## Service Priorities and Programmes Electronic Presentations

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### **Retrospective Review of Using Chlorhexidine 0.05% Antiseptic Solution before Surgical Wound Closure**

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#### **Keywords:**

Chlorhexidine 0.05%

SSI

VAP

CLABSI

CAUTI

CAUTI

#### **Introduction**

Our department always strives to reduce infection via a variety of methods. Sutures coated with antimicrobial were used for surgical wound closure for years. Chlorhexidine 0.05% antiseptic solution was introduced from 2014 for surgical wound cleansing before suturing. A retrospective review was done to assess its effectiveness.

#### **Objectives**

- (1) To assess the rate of SSI (surgical site infection) after introduction of new practice;
- (2) To observe for any change in other types of infection after using the antiseptic solution.

#### **Methodology**

After the implementation of chlorhexidine 0.05% antiseptic solution from 2014 onward, a retrospective review of SSI, VAP (ventilator associated pneumonia), CLABSI (central line associated blood stream infection) and CAUTI (catheter associated urinary tract infection) was done from 2011 to 2015.

#### **Result**

From 2011-2013, the SSI rate ranges from 0.4 to 4.3 per 1000 operation, compare with 0.4 to 1.2 per 1000 operation from 2014 till the 3rd quarter of 2015. As to VAP and CLABSI, zero case was noted from 2nd quarter of 2014 and this record was maintained for a year. During the review period, the cases were free from VAP, CLABSI as well as CAUTI for a quarter of 2014 (3rd quarter to 4th quarter). Chlorhexidine 0.05% antiseptic solution is encouraged to use for surgical wound cleansing before suturing as an adjunct with other infection control strategies (such as timely administration of appropriate antibiotics, antimicrobial sutures, correct skin preparation and so on). Recommendation: the antiseptic solution application has

been implemented for around 2 years only. The monitoring should be continued for a longer period of time for collection of larger pool of data for comparison meticulously.