Sternal wound infection risk factor

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Abstract

Background

Coronary artery bypass graft surgery, is a type of surgical procedure (open heart surgery),that aim to restore normal bloodstream to an obstructed coronary artery. In some cases infection can occur in the place of the operation, There are several risk factors and complication associated with that.

Aim

The study aims to identify and assess risk factors and complications of sternal wound infection among patients of post CABG surgery.

Methodology

A quantitative descriptive design was conducted in this study, a 68 sample was collected from 1 Hospital in Nablus City in West Bank, conveniently chosen, and a structured questionnaire was used to collect data from patient files, which has three parts: demographic data, risk factors ,and complication part.

Results:

Results show that the sternal wound infection was low where the prevalence of SWI is (2.2%) and the most common prevalence of risk factors was are hypertension (68.1%), diabetes mellitus (67.5%) and smoking (55.1%), the prevalence of sternal wound complication percent is (2.9%) and among the complications that occur is mediastinitis (1.4%). The most patients age was between 55 to 64 years old (44.9 %) with past surgical history(68.1%) and many patients perform The CABG Surgery for the first time92.8%, also the result show that there is relationship between demographic data (gender, length of staying in hospital, and ICU), pre and post CABG lab results, surgical and medical history with development of sternal wound infection.

Conclusion

In this study, we demonstrate there is a relationship between demographic, risk factors data with occurring of sternal wound infection, such as hypertension, diabetes mellitus, and smoking an independent predictor of cardiac health problem which have a low relationship rate. Further studies are needed to confirm the findings of the present study, to address the drawbacks of previous studies and to assess the applicability of these results in daily medical practice.

Key words

Coronary artery bypass graft(CABG), Deep sternal wound infection (DSWI), Surgical site infections (SSI), Hypertensions(HTN), Diabetes mellitus(DM)