

Accepted Manuscript

Surgical site infection following open reduction and internal fixation of a closed ankle fractures: A retrospective multicenter cohort study

Ran Sun, Mingqiao Li, Xiaofeng Wang, Xiaodong Li, Lumei Wu, Zheng Chen, Kang Chen



PII: S1743-9191(17)31325-0

DOI: [10.1016/j.ijso.2017.10.002](https://doi.org/10.1016/j.ijso.2017.10.002)

Reference: IJSU 4201

To appear in: *International Journal of Surgery*

Received Date: 6 July 2017

Revised Date: 20 September 2017

Accepted Date: 2 October 2017

Please cite this article as: Sun R, Li M, Wang X, Li X, Wu L, Chen Z, Chen K, Surgical site infection following open reduction and internal fixation of a closed ankle fractures: A retrospective multicenter cohort study, *International Journal of Surgery* (2017), doi: 10.1016/j.ijso.2017.10.002.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Abstract

Background: Identification of risk factors for surgical site infection (SSI) after surgical ankle fractures was important, but related evidence was inadequate. This study was conducted to investigate the incidence and risk factors for SSI after open reduction and internal fixation (ORIF) of a closed ankle fractures.

Methods: Patients who underwent ORIF for a closed ankle fractures at 3 centers between July 2015 and January 2017 were included. Electronic medical recordings (EMR) and Picture Archiving and Communication Systems (PACS) were inquired for information on patients' clinical and radiographic characteristics. The potential factors include 4 aspects: demographics, injury-related, surgery-related and biochemical indicators. Factors related with SSI were analyzed by univariate and further by multivariate logistic regression model.

Results: During the hospitalization, 3.7% (46/1247) of patients developed SSI, with 1.12% (14/1247) for deep and 2.57% (32/1247) for superficial SSI. Approximately half of SSIs were caused by Methicillin-resistant *Staphylococcus aureus* (MRSA). After adjustment for confounding factors, higher body mass index (BMI), surgeon level (residents or treating surgeon), surgical duration >130mins, delayed surgery, preoperative TP < 60g/L were significant risk factor or predictors for SSI occurrence.

Conclusions: After comprehensive evaluation of patients medical conditions, immediate operation by a surgeon with more expertise could effectively reduce SSI occurrence.

Key words: SSI, closed ankle fracture, ORIF, retrospective, multicenter

Download English Version:

<https://daneshyari.com/en/article/8832148>

Download Persian Version:

<https://daneshyari.com/article/8832148>

[Daneshyari.com](https://daneshyari.com)