

Abstract

Purpose

Open fracture is the most common cases occur in Indonesia. It may occur to anyone at any age, which mostly caused by an external trauma. Main purpose of this study is to understand the epidemiologic information of open fracture and its infection.

Methods

Cross sectional retrospective study of medical records in Dr. Soetomo hospital was done in this research to observe descriptive data such as sex, ages, fracture causes also infection which occurs in open fracture patient in Dr. Soetomo Hospital during the whole 2015.

Results

From 359 sample collected, ratio between male and female were found 3:1, with 20-29 age groups as the most common cases. Most common cause of the open fracture is traffic accident with 65.2% cases of all the open fracture case. Upper extremities were the most common site of injury with 188 cases out of 359. Infection which occurs was septic arthritis and post prosthetic infection and they were found in 2 out of 359 patients or around 0.5% case. Infection occurred tested using independent t-test and it shows that sex has $p= 0.442$, age has $p= 0.054$, month open fracture case reported has $p= 0.105$, open fracture causes with $p= 0.095$, and area of open fracture with $p= 0.474$.

Conclusions

This research proves that the open fracture cases occurs mostly in male, 20-29 year old, and mostly caused by traffic accident. It also shows that infection which occurs as complication of open fracture is minimum.

Keywords: Open fracture, infection, trauma, traffic accident, epidemiology