

**ABSTRACT****STUDY OF CEFAZOLIN IN OPEN FRACTURE GRADE I PATIENT AT KSM ORTHOPAEDIC UNIVERSITAS AIRLANGGA HOSPITAL SURABAYA**

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**BACKGROUND.** Open fracture infection cases 70% were caused by Gram positive microorganism such as *Staphylococcus aureus* and *Staphylococcus epidermidis*. Cefazolin have several benefit such as more active for Gram positive microorganism and due to their high lipofilicity cefazolin has excellent distribution profile in bone.

**OBJECTIVES.** The aimed of this study was to analyze utilization pattern, dosage, frequency, timing of administration, and duration usage of cefazolin.

**METHODS.** The observasional and retrospective method with time limited sampling from January 2<sup>nd</sup>, 2014 until December 31<sup>st</sup>, 2017 and descriptive analysis was conducted in this study (N=25).

**RESULT AND CONCLUSION.** The result showed that were 25 patient with open fracture grade I used cefazolin (1x2g) iv as prophylaxis and cefazolin (3x1g) iv used as switch. Two pattern of switch 43% used cefazolin (1x2g) iv and followed by used cefazolin (3x1g) iv. Three Pattern of switch majority (38%) used cefazolin (1x2g) iv followed by used cefazolin (3x1g) iv and when patient discharge the hospital received cefadroxil (2x100mg) po. Four pattern of switch majority (86%) used cefazolin (3x1g) iv followed by using cefazolin (1x2g) iv and then cefazolin (3x1g) and cefadroxil (2x500mg) po when discharge the hospital. Timing of administration prophylactic antibiotic majority 28% received 20 minutes before incision. The duration usage of cefazolin commonly 44% given 2 days. Based on the description, pattern usage of cefazolin including dosage, frequency, timing of administration, and duration usage in open fracture grade I patient at KSM Orthopaedic Universitas Airlangga Hospital has been appropriate with guidelines and other references recommendation.

**Keywords:** Cefazolin, Open Fracture Grade I, Orthopaedi