## SHORT TERM OUTCOME OF TREATMENT OF CLOSED ANKLE FRACTURES AT THE UNIVERSITY TEACHING HOSPITAL OF KIGALI

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**Background:** This study investigated the functional and radiological outcomes at six months post-treatment of closed ankle fractures at the University Teaching Hospital of Kigali during a period of four months: 1st February to 31st May 2012.

**Methods**: This was a descriptive case series study using retrospective data and review of patients. It included patients who underwent ankle fracture treatment at UTHK from 1st August to 30th November 2011. Age, gender, cause of injury, fracture type, Weber classification, type of treatment and outcome at six months were recorded. Statistical analyses were conducted using SPSS software version 16. The Olerud-Molander Ankle Score and radiological assessment were used to evaluate the outcome.

**Results**: Out of 59 patients with ankle fractures, 42 met inclusion criteria. 25(59.5%) were female and 17(40.5%) male with an average age of 39.43 years (SD=14.26). The left ankle was affected in 69 % of the patients. Majority of fractures 59.6% were due to twisting and falls. The type of treatment was conservative in 78.6%, and the mean functional outcome, using Olerud-Molander Ankle Score, at six months was 75.24%. There were no significant differences in outcome between sex, age group and treatment type (p=0.3; 0.3; 0.6); patients with unilateral malleolar fractures had excellent/good functional outcome (p=0,049) and excellent/good radiological outcome (p=0.03) compared to those with bimalleolar fractures. The patients with good radiological outcome (90 %) (p=0.000) had 18 times chance to have excellent/good functional outcome [3.31 - 97.76].

**Conclusions**: In our study, ankle fractures occur most commonly in middle-aged patients and females are more prevalent. The most common mechanisms of injury are twisting and falls injuries. Patients with unilateral malleolar fractures showed good functional and radiological outcomes and therefore good association.