

**SHORT TERM OUTCOMES OF SKULL TRACTION WITH A FIXED WEIGHT FOR
TRAUMATIC CERVICAL SPINE DISLOCATIONS AT MULAGO HOSPITAL**

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ABSTRACT

Introduction: Cervical spine dislocations are serious injuries that are a major cause of morbidity and mortality. In well resourced centers cervical spine dislocations are reduced by rapid traction with the use of increasing weights under x-ray guidance. At Mulago hospital gradual skull traction over five days with $\frac{3}{4}$ of standard weight for a given level of dislocation without the aid of x-ray is used. This study investigated the radiological and neurological outcomes of the method used at Mulago.

Objective: Was to determine the radiological and clinical outcomes of skull traction with a fixed weight in patients with traumatic cervical spine dislocation admitted to Mulago spine unit.

Methods: Nineteen Patients with cervical spine dislocation were put on skull traction and followed up daily for five days. Frankel grading, radicular signs, blood pressure, pulse and respiratory rate were recorded daily for five days. The study ended on day 5. Cervical spine reduction was determined by x-ray done on day 6. The secondary outcomes sought were complications like bed sores, neurological or cardiorespiratory changes.

Results:

Seventeen out of nineteen patients (89.4%) had their cervical spine dislocations reduced after 5 days of skull traction. The respiratory rate of one of the patients on skull traction improved from 20 breaths per minute on day 1 to 12 breaths per minute by day 5. There were no other significant cardiorespiratory changes or complications. One patient developed bed sores and another developed paralytic ileus. Only 1 out of 19 patients had any change in the Frankel grading. She improved from Frankel A to B.

Significance: The findings of this study will contribute to the initial objective data needed to develop standard guidelines on skull traction for patients with cervical spine dislocations admitted at the Mulago spine unit.