AN AUDIT OF TRAUMA INTERCOSTAL DRAINS AT TEMBISA HOSPITAL

M R Nkomo

Student no. 8702222p

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DECLARATION

I ..... student number

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- I am aware that plagiarism (the use someone else's work without their permission and/or without acknowledging the original source) is wrong
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Signed:.....

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DEDICATION

This study is dedicated to my late family members:

- Father, Don Arthur Phangindawo, Mntungwa, Golela, Yengwayo!
- Mother, Thokozile Thalitha “MaMnguni”
- Younger brother Sonwabo Andile Nkomo

ABSTRACT

Background: Chest trauma is a common Emergency Department presentation. Most patients are treated by the Advanced Trauma and Life Support (ATLS^{TM}) principles and the insertion of an intercostal drain (ICD) where indicated. However, the procedure has complications.

Aim: The aim of this research project was to study trauma ICDs at Tembisa Hospital.

Objectives: The objectives were to (a) obtain demographics, (b) determine complications, (c) compare the complications between those of Tembisa Hospital and Tygerberg Hospital (d) determine whether mechanism of injury, indication for the ICD, time of day, trauma team, ICD duration, length of hospital stay and the patient's age were risk factors for developing complications.

Results: (a) Of the 251 patients and 285 ICDs, 244 (97.2%) were males. The ages varied between 14 and 61 years (28.77 mean). ICD duration ranged from 1 to 35 days (5 mean). Length of hospital stay was between 1 to 68 days (6.32 mean). Stab wounds were the most frequent type of injury (81.6%). Penetrating injuries accounted for 94% of all injuries. Indications for ICD insertion were 89 (34%), 86 (32.8%) and 81 (30.9%) for haemopneumothoraces, haemothoraces and pneumothoraces respectively. (b) There were 64 complications (22.5%) among 49 patients (19.5%). (c) Both Tembisa Hospital and Tygerberg Hospital had "loose" ICDs and malpositions among their commonest

complications. (d) Only ICD duration and length of hospital stay were risk factors for developing complications at Tembisa Hospital.

Conclusion: Doctors should be taught proper ICD insertion and fixation techniques. ICD duration should be minimized.

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