Dissertation in part fulfilment for the award of the Degree of Master of Medicine in Surgery, University of Nairobi.

TITLE

Dog Bite Injuries As Seen At Kenyatta National Hospital.

By: Dr. Daniel M. Mbinga

Supervised by: Prof. G.A.O. Magoha
IOM, MBS, FIBA, MISC, MKNAS, FICS, FCS (ECSA)
FWACS, FMCS (Urol)
Vice Chancellor,
University of Nairobi
SUMMARY

This was a prospective case series study over a duration of three months. The purpose of the study was to determine the incidence of dog bite injuries, the epidemiological characteristics of dog bites and their management and complications.

Methodology: Consecutive and consenting patients who presented with dog bite injury were recruited into the study. Data on demographics, circumstances surrounding dog bite, clinical features, possible complications and risk factors for infection was collected using a structured data sheet. This data was analysed and presented in tables, charts, graphs and descriptively.

Results: Seventy three (73) patients with dog bite injuries were recruited into the study. Most patients with dog bites resided in low income and middle income estates of Nairobi. The age range was between 2 to 68 years with a mean of 21 1/2 years. The male to female ratio was 1.5:1. Most of the biting dogs were male and unvaccinated against rabies. Most of the biting dogs (62%) were known to the victim and were unrestrained (66 out of 73). Sixty eight percent (68.5%) of the bites occurred in or around the victim's compound or at a neighbour's compound and 31.5% of the bites are by a stray dog. Eighty percent (80.8%) of the bites were unprovoked.

Most of the injuries (64.64%) were puncture wounds involving mainly the lower limbs (60.3%) or upper limbs (20.5%). Wound irrigation, debridement and suturing was rarely used in treating dog bites while antibiotics were prescribed in 61.6% of the patients, tetanus toxoid injection was given to 82.2% and antirabies vaccination was provided to 91.8%. The commonest complication was
wound infection (16.4%). Rabies and tetanus did not develop in any of the study subjects during the period of the study.

**Conclusion:** Dog bite injury is not an uncommon problem. A high wound infection rate is probably related to poor patient evaluation and treatment practices.

**Recommendation:** Dog bite injury management protocol should be developed and implemented at KNH. Studies should be carried out to clarify risk factors involved in dog bites and to define the role of antibiotics in treating dog bite injuries.