DOG BITES IN CHILDREN: A DESCRIPTIVE ANALYSIS

Connor McGuire, Alex Morzycki, Andrew Simpson, Jason Williams, Michael Bezuhly

PLASTIC SURGERY

BACKGROUND:
Having observed the potentially devastating impact of dog bites in children, this study was designed to characterize the features of dog bites injuries and their management in a paediatric population.

METHODS:
Patients presenting with a dog bite to the emergency department of a tertiary care paediatric hospital between January 1, 2015 and June 30, 2017 were included. Details related to management were extracted from records. Descriptive statistics were performed and binary logistic regression was used to assess potential predictors of infection.

RESULTS:
158 dog bite patients were identified over this 30-month period. Most patients were male (53.8%) and half were less than five years of age. The face was most commonly involved (42.9%) followed by the scalp (26.6%). Pit bulls (11.4%), Labrador retrievers (7.0%), and German shepherds (4.4%) were the most commonly identified offending breeds. Most bites were superficial in nature (91.1%). Half were treated conservatively with dressings and ointment, with 41.1% requiring simple primary closure. Ten cases underwent repair in the main operating room under general anesthesia (6.3%). Plastic surgery was the most common service consulted (24.7%). Rates of infection did not differ between patients who did or did not receive prophylactic antibiotics (p=0.88). Regression analysis revealed no significant predictors of infection.

CONCLUSION:
While approximately 5 dog bite injuries present each month, most are fortunately superficial and require only basic treatment. Despite this, given that most bites occurred on the face, the potential disfigurement is significant. Education and caution, particularly around large and aggressive breeds, is recommended to reduce this public health problem and protect this vulnerable population.