Dog Bite Injuries to the Face: a Narrative Review of the Literature

Abstract:

Introduction and Aims:

Dog bite injuries remain a public health concern for two key reasons: the physical threat to health following attack and the infective sequelae a canine bite can incur. Facial bite injuries can result in significant emotional, psychological and physical trauma to victims involved. This narrative review elucidates the current presentation and management of dog bite injuries to the face.

Material and Methods:

A literature search was conducted electronically using the search terms “dog bite” AND “face” AND “management” using the National Library of Medicine (PUBMED) and the Cochrane Library. There were no time nor language restrictions. A total of 79 studies were initially retrieved using the search algorithm. After screening of the titles and abstracts, 9 full texts were retrieved, and a total of 7 studies included.

Key Results:

The number of patients included in each study following a dog bite ranged from 40 to 223. The percentage of children included in each study (aged <18 years old) ranged from 27.5 to 100%. The majority of dog bite injuries to the face were managed by primary repair, ranging from 56.3% to 100%. Prophylactic antibiotics were used in most studies for dog bite injuries, ranging from 81% to 100%. The secondary infection rate following a dog bite ranged from 0% to 35%.

Conclusions:

This review highlights that children are disproportionately affected by canine bite injuries to the face relative to adults. Early management of these injuries is critical in reducing morbidity and mortality. More units are managing such injuries with primary repair and prophylactic antibiotics.