

UNUSUAL FATAL DOG ATTACK IN DUNEDIN, NEW ZEALAND

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ABSTRACT

A case of a fatal dog attack on a middle aged woman is presented. The offending dog was her own Bull-mastiff, which had previously shown signs of aggression towards her. Most of the injuries were found on the victim's face, neck and skull. A noteworthy feature of this attack was that the victim was known to suffer from Huntington disease. It is postulated that the involuntary movements, progressive dementia and increased moodiness characteristic of the disease may have had a significant role in triggering the attack.

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Key words: bite marks, animal attacks, dog bite

INTRODUCTION

Man's best friend sometimes doesn't live up to the billing. Despite dogs having been domesticated for an estimated 12,000 years¹, the capacity for any animal to become violent when sufficiently provoked remains inherent. Dog attacks on humans receive considerable attention in the media and are an ongoing area of interest for medicine, veterinary science and forensic science.²⁻⁷ Veterinary behaviourists note that canine aggression is usually directed towards persons known to the dog, and is ascribed to the diagnostic criterion of 'dominance'.⁸⁻¹⁰

With a population of 4 million, it is estimated that there are over 600,000 dogs in NZ.¹¹ Two previous studies have examined the incidence of hospitalisation for dog bites in New Zealand. In the first study, Langley¹² gathered data from the period 1979 to 1988 and reported that there were 961 dog bites resulting in hospitalisation, with no fatalities reported over this period. The second study examined hospital records between 1989 and 2001 and found that there were 3,119 hospitalisations and one fatality.¹³ Of these, 94 were estimated to have been from being 'struck' by a dog, rather than being bitten. Thus 3,025

hospitalisations were estimated to have resulted from dog bites. Additionally, the New Zealand Health Information Statistics recorded 309 overnight visits after dog bite incidents in 2000, 293 in 2001, and 324 in 2002. These figures appear to represent an escalating trend in admissions similar to that observed in other countries.¹⁴

Marsh¹³ reported that in New Zealand, Europeans represent 52% of the total bite victims, Maori 28% and others 20%. Maori make up 15% of the total population, and hence are over-represented. He also found that, where location was specified, 30% of victims were bitten at home, 6% on the street and 1% on a farm. Of the total sample 60.5% of bites were to males.

In this report we detail a recent fatal dog attack in Dunedin, New Zealand, a case which is complicated by the suggestion that the victim's medical condition could have provoked her dog's behaviour.

CASE REPORT

On 18 August, 2004, a Dunedin woman was savaged to death by her pet Bull-mastiff dog. A confrontation had apparently occurred in the lounge of her family home after which the dog dragged her outside and continued the attack. The victim received major head, neck and upper-limb injuries in the attack. The Bull-mastiff is thought to have released its owner of its own accord and was wandering around the back yard in an agitated state when police arrived.

The 5-year-old male dog had been the subject of four reports to animal control teams in the previous 18 months – twice for barking, once for straying and once for its aggressive behaviour towards the victim. The victim had also previously contacted the local authority to complain of the dog's increasingly aggressive behaviour, but then withdrew consent for it to be impounded.

The victim was a slightly built (46kg) woman of 39 years of age. Examination showed extensive bites

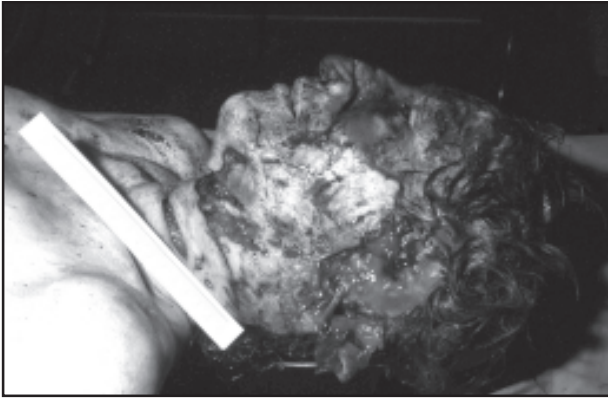


Fig.1: Multiple injuries on the left half of the face and neck, and loss of the left ear of the victim

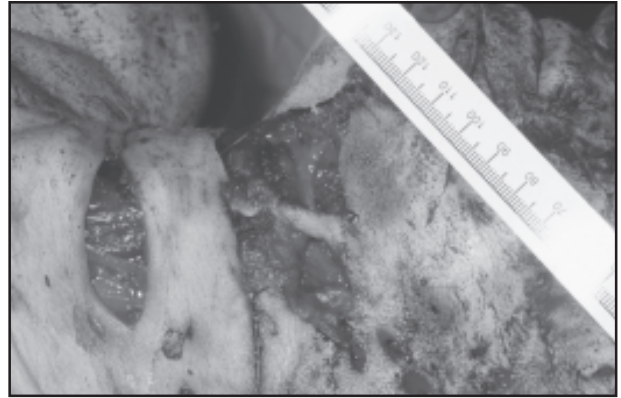


Fig.2: Dog bite wounds on the neck of the victim

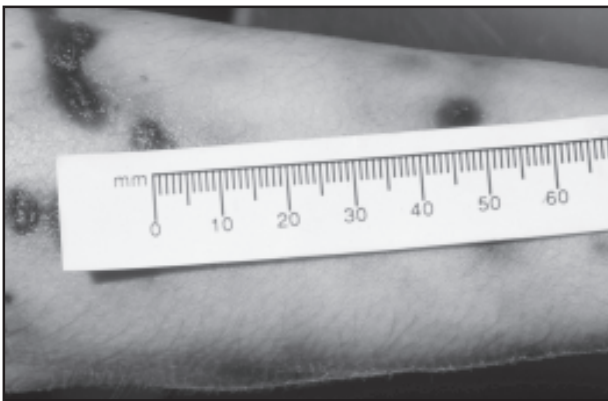


Fig.3: Canine puncture marks on left arm of the victim

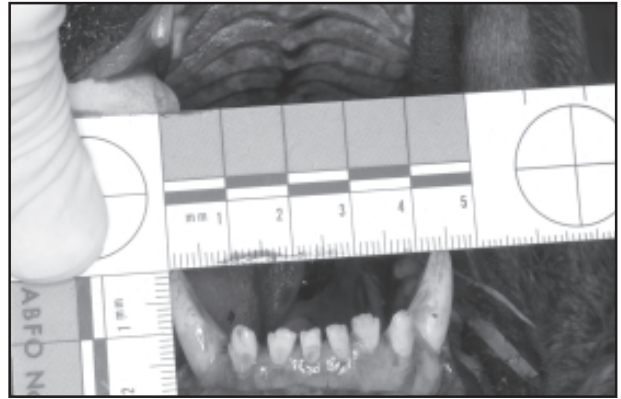


Fig.4: Lower anterior dentition and intercanine distance in the dog involved

to both right and left arms, originating just above the elbow. While there were what appeared to be healed bite marks and bruises on her lower legs, there were no fresh bite marks in these areas.

The majority of the serious wounds were found on the victim's face, neck and skull (Fig. 1). A laceration (70mm long, 8mm wide) extended from 1cm below the right inner canthus across the bridge of her nose and terminated above the left infra-orbital foramen. The left ear and soft tissue covering the back of the skull was missing. There were firstly, a 25mm laceration running medially over the right temporalis above the level of the eyebrow and secondly, a 35mm gaping laceration midway between the brow and the hairline extending from above the outer canthus of the eye to the midline. Her lower face was untouched. The largest wounds were to the back and left side of



Fig.5: Upper anterior dentition and intercanine distance in the dog involved

the neck (Fig. 2). The back of the neck showed a large gaping wound, 70mm long, just below the hair-line, whilst the left side had a 55mm long tear running horizontally at the level of the thyroid cartilage. Superior to this were two lacerations of 30mm each with a small isthmus of tissue separating them. Each of these terminated over the region of the hyoid. Numerous canine drag marks were visible over the skull, upper face and arms. There were also extensive bite wounds on both the left and right forearms and on the left arm there were two canine puncture marks 46mm apart (Fig. 3). This corresponded to the Bull-mastiff's intercanine distance measured at autopsy (Figs 4 & 5). A canine puncture wound was found in the trachea on her left side coincident with the most caudal of the three lacerations found in that region.

In the light of the autopsy findings, the coroner attributed the cause of death to exsanguination and asphyxia.

VICTIM'S MEDICAL HISTORY

What makes this a noteworthy case is the interesting effect that the victim's medical condition may have had on the attacking dog. She was known to have Huntington disease (HD), also known as Huntington chorea (HC), an inherited disease (autosomal dominant with complete penetrance) characterised by choreiform involuntary movements and slowly progressive dementia.

It is known that a significant number of persons affected by HD present with primary complaints of involuntary movements or rigidity. For the remainder of cases, the primary presentation is of mental changes that initially appear as increased irritability, moodiness or antisocial behaviour. Patients may become emotionally volatile, argumentative, erratic or physically aggressive. The classical presentation of choreiform movements begins as a piano-playing motion of the fingers or as facial grimaces. As the condition advances it involves the trunk, and a characteristic dancing gait results. Although patients appear to be off-balance, the ability to balance is actually well preserved. Patients may be impulsive or seem to act irrationally.¹⁵

Canine aggression has traditionally been attributed to dominance, or an attempt by the dog to achieve a superior rank among members of the household.¹⁰ However, it is also recognised that dogs showing dominance aggression might actually be responding to anxiety rather than to a challenge to their perceived rank.^{16,17} This may have been a precipitating factor in the present case.

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