



Fatal rooster attack

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Abstract

A 76-year-old woman was attacked by a domestic rooster on her rural property while collecting eggs. The bird pecked her lower left leg causing significant hemorrhage with collapse and death. The decedent's past medical history included treated hypertension, hyperlipidemia, non-insulin dependent diabetes mellitus and varicose veins. At autopsy the major findings were limited to the lower left leg which was covered with adherent dried blood. Two small bleeding lacerations were present, one of which was located immediately over a perforated large varix. Death was therefore due to exsanguination from bleeding varicose veins following an attack by a rooster. This case demonstrates that even relatively small domestic animals may be able to inflict lethal injuries in individuals if there are specific vascular vulnerabilities present.

Keywords Rooster · Death · Hemorrhage · Varicose veins · Animal attack

Case report

A 76-year-old woman was collecting eggs from a chicken coop on her property in rural South Australia when she was attacked by an aggressive rooster. The rooster pecked her lower left leg causing significant hemorrhage from varicose veins. The decedent had called out to inform her husband of the attack. He then observed her standing in front of the coop and then collapsing in the driveway. She was dead by the time ambulance personnel had arrived. Attending police officers noted blood inside the chicken coop, with a larger pool just outside next to a bucket containing eggs which were also spattered with blood. A trail of blood led to the body adjacent to the side entrance of the house (Fig. 1).

The decedent's past medical history included treated hypertension, hyperlipidemia, non-insulin dependent diabetes mellitus and varicose veins. The varicose veins had been

previously operated on but were of sufficient severity to make ambulation difficult.

At autopsy the body was that of an obese (BMI 35.1) elderly female. The major findings were limited to the lower left leg which was covered with adherent dried blood (Fig. 2). A small bleeding linear laceration measuring 10 mm in length was present in the midline of the calf approximately 205 mm above the sole of the foot (Fig. 3a). Dissection revealed a large varix immediately



Fig. 1 The chicken enclosure where the rooster attack occurred. The bucket with eggs dropped by the decedent can be seen near the entrance (arrow). A trail of bloody foot prints leads to a tree stump and then to the driveway where the body was found. The rooster is still in the enclosure

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Fig. 2 The left lower leg and foot of the decedent at the scene with extensive surrounding hemorrhage. Her trouser leg has been cut by attending ambulance personnel

underlying the defect (Fig. 3b). Above and medial to this was a second stellate laceration measuring approximately 5 mm across which had also been bleeding (Fig. 4a). Dissection revealed marked underlying interstitial hemorrhage (Fig. 4b). Below and medial to the lower wound was an interrupted linear patterned abrasion measuring approximately 70 mm in length (Fig. 5). The stellate laceration and patterned abrasion both had features in keeping with trauma from a rooster beak. Histology revealed pulmonary emphysema and hypertensive changes within the kidneys. The lacerated areas showed loss of superficial epithelium with large underlying varices (Fig. 6) surrounded by recent interstitial hemorrhage. Toxicology revealed only therapeutic levels of amlodipine.

The remainder of the autopsy revealed no other significant trauma and no underlying organic diseases

which had caused or contributed to death. Death was therefore attributed to exsanguination from bleeding varicose veins of the left lower leg following an attack by a rooster.

Discussion

Attacks on humans by birds have been well described in the literature and usually involve nonlethal injuries to the face and head from swooping [1–4]. Ocular and periocular injuries may be quite severe and result in loss of sight in the injured eye [5–7] however lethal bird attacks are seldom encountered. For this reason, the above case was reported.

Roosters are well known for their aggressive behavior [8], sometimes associated with territoriality, which may result in attacks on humans. Children are at particular risk with injuries occurring particularly to the head from beaks or spurs. Such injuries from rooster attacks often center on the eyes and have been associated with skull fractures and subsequent eye infections [6, 7, 9]. Infections may also rarely be associated with retained spurs within wounds that will necessitate eventual surgical removal and abscess drainage [10].

Deaths due to rooster attacks are extremely rare with two pediatric cases being reported: the first a 16-month-old child dying from a large brain abscess associated with a rooster peck to the left side of her head [11]; and the second a two-year-old Indian boy who died of head injuries from pecking [12]. The case of a 35-year-old man who died following an attack by a rooster at an illegal cock fight has also been described in the media. He died from a penetrating wound to the calf from the metal spur that had been attached to the rooster's leg for fighting [13]. Further lethal cases are, however, difficult to find.

Fig. 3 A small bleeding linear laceration measuring 10 mm in length in the midline of the calf approximately 205 mm above the sole of the foot (a). Dissection revealed a large varix immediately underlying the defect (b)

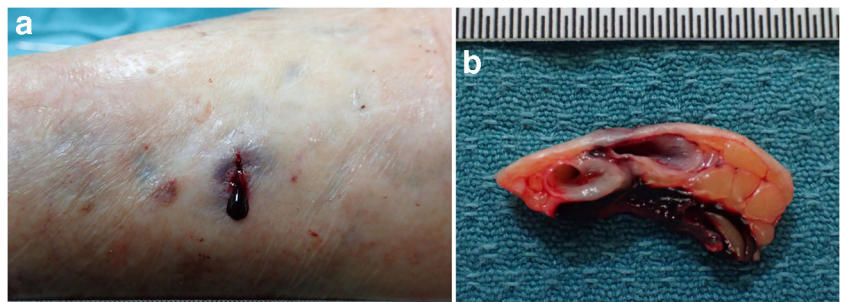
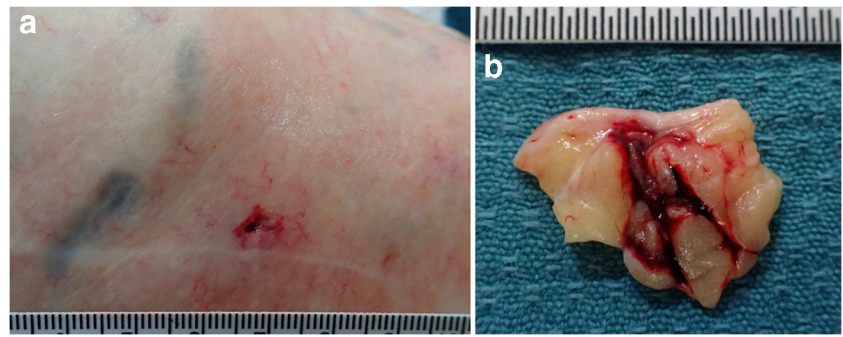


Fig. 4 Above and medial to the wound in Fig. 3 was a second small stellate laceration measuring approximately 5 mm across which was also bleeding (a). Adjacent blue varicosities are noted, as well as linear scarring from previous surgery for varicose veins. Dissection revealed marked underlying interstitial hemorrhage (b)



The current case is somewhat different in that an underlying medical condition in the decedent's lower leg, i.e. varicose veins, made her vulnerable to limb trauma. Varicose veins are common findings at autopsy affecting approximately 40% of people in the community [14, 15]. They appear as tortuous dilated veins in the legs with associated edema and brownish induration of the skin and subcutaneous tissues, sometimes associated with ulceration [16]. The fragility of the skin and underlying soft tissues in older individuals means that varicose veins are vulnerable to injury from relatively minor trauma [17]. This has, on occasion, resulted in significant hemorrhage. In some cases there may also be overlying ulceration which has compromised the integrity of the wall of the underlying varix. Failure to appreciate the need for urgent first aid measures in the form of elevating the leg and applying direct pressure to the bleeding point has characterized lethal cases, as in the present report. Such events are, however, very rare [18, 19] accounting for <0.01% of

autopsy cases in one series. The pattern of bleeding from a lower limb varix may be confusing at the death scene as it may resemble arterial rather than venous hemorrhage due to the small diameter of the defect and the high pressure of the pooled blood in the legs [20].

While tissue removal from bodies by birds is most often a post mortem phenomenon associated with avian scavenging behavior [21], occasionally, as in the present case, significant antemortem injury may be inflicted that may be lethal. Although a wide variety of animal activities may cause deaths in humans, ranging from dismemberment to envenomation [22, 23], this is the first case of fatal exsanguination that was caused by a rooster attack that we are aware of. A similar case involving a superficial scratch from a domestic cat causing fatal bleeding from lower leg varicose veins has been previously encountered although not reported (Dr. C. Charlwood, personal communication). Thus, even relatively small animals may be able to inflict lethal injuries in individuals if there are specific vascular vulnerabilities present. Individuals with varicose veins should, therefore, be aware of potential, albeit rare, dangers from domestic animals.



Fig. 5 Below and medial to the lower wound was an interrupted linear patterned abrasion measuring approximately 70 mm in length. The stellate laceration (Fig. 4) and patterned abrasion both had features in keeping with trauma from a rooster beak

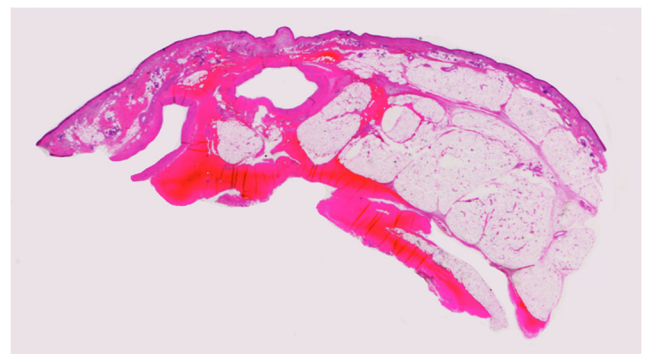


Fig. 6 A wholemount slide showing the superficial position of the large varices (Hematoxylin and eosin)

Compliance with ethical standards

Conflict of interest None.

Ethical approval Forensic Science SA.

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