

Case study on the treatment proceedings of a lacerated tail in an adult male Asian Elephant (*Elephas maximus*), in Bannerghatta National Park

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Abstract

This document highlights brief observations and proceedings of a proposed medical intervention conducted for an injured free-ranging adult male elephant at Bannerghatta National Park, Karnataka. The animal was observed to have a lacerated tail along with several penetrative wounds on the hind limbs and laterals. Medical intervention in the form of oral administration of anti-biotics through the use of baits was employed. An uneventful recovery of the injuries was observed post treatment.

Case Report

An adult male elephant between the age-class of 30-35 years was observed by forest watchers with injuries in the Bannerghatta wildlife range of Bannerghatta National Park. The bull was observed to be in isolation and restricted its movements to the edge of a water hole found within the range. Preliminary examination on the extent of injuries revealed the animal to have a lacerated tail with the possibility of necrotic tissue or gangrene formation. In addition to the wound inflicted on the tail, several inflammations accompanied by penetrative wounds were noticed on both the hind flanks, laterals and on the rear of the individual. These wounds did not seem debilitating even though the movement of the animal was restricted, which could be attributed to the availability of a water source. The animal was predominantly observed to have been spraying water on both its laterals and on the tail which could be compared to performing a lavage in the form of self-treatment. For general treatment of lacerated wounds (Fernandez and Griffiths 2008; Manoharan *et al.* 2016) and suppurative wounds (Sky Vets Report 2013) in elephants, injuries of this nature are often flushed with saline or tap water.

Tail injuries in wild elephants are often attributed to agnostic interactions with conspecifics, which are seen in both the sexes. Sarma *et al.* (2010) states that gangrene formation in tails of female camp elephants is often caused due to logging injuries, conspecific biting in a group, from other animals and insect bites. Tail biting is considered an intense tactile agnostic interaction between male-male competitions in elephants (Chelliah and Sukumar 2013).

The cause for the penetrative wounds is uncertain as they could have been received as a result of an agnostic interaction with a conspecific or due to embedded foreign bodies. There was no purulent

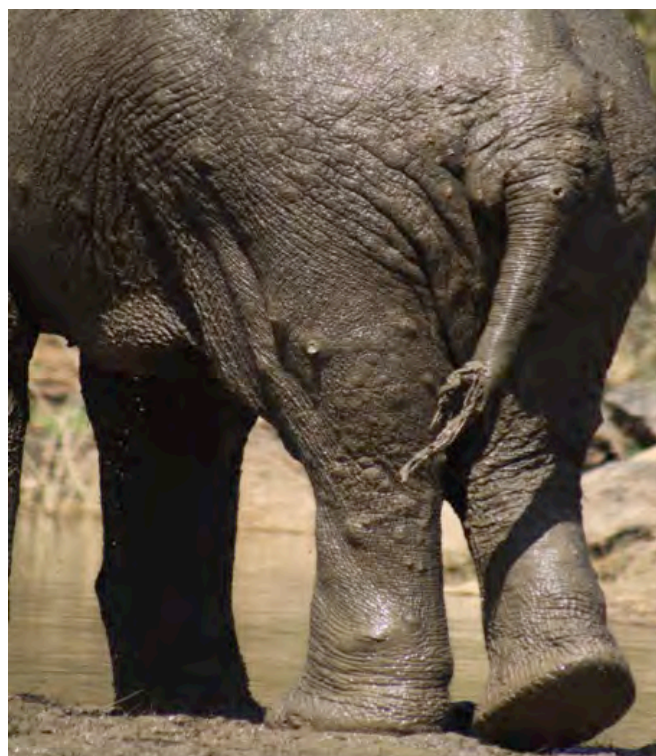


Fig 1. Lacerated tail with necrotic tissue and penetrative wounds on the left lateral and hind leg



Fig 2. Baits inserted with anti-biotic tablets and unbaited treats placed under a tree

discharge noticed from these penetrative wounds however there were slight inflammations around the injuries (Fig. 1).

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Fig 3. Uneventful recovery of tail and localized inflammation as observed

On a preliminary inspection the injuries sustained by the individual did not seem incapacitating, however due to the possibility of gangrene formation anti-biotic treatment was prescribed. Gangrene if left untreated can result in septicemia and death (Sarma *et al.* 2010).

Treatment Procedure

Since the movement of the animal was restricted to the water hole, treatment in the form of oral administration of medication through the use of baits was suggested. 10 tablets of Amoxicillin+ Clavulanic acid (500 mg) brand: Melonex, was prescribed as a daily dosage. These tablets were placed inside certain palatable foods such as watermelon (*Citrullus vulgaris*) and banana (*Musa paradisiaca*); and provided along with other un-baited treats such as sugarcane (*Saccharum officinarum*), cattle-fodder grass (species unknown) and jaggery. These baits were placed under a tree and along a forest path close to the water hole where the injured animal was found (Fig. 2).

A ground-forest staff was deputed to monitor the animal and also provide the oral anti-biotic

medication for the treatment procedure. On the first day of the treatment - out of the 10 tablets that were administered to the injured bull, he was observed to consume 4 of the baits containing medication. During the next 6 subsequent days of treatment the animal was seen to consume all 10 of tablets administered daily.

Discussion and Outcome

The treatment of the individual was suspended after 6 days as the animal moved away from the water hole and tracking its movements became difficult. Approximately 56 days after treatment of the injured bull had ceased, the animal was spotted by the forest staff and researchers at another water hole in the Bannerghatta wildlife range. The necrotic tissue that was present on the tail during the first examination was absent and no gangrene was observed; the wound appeared to have healed (Fig. 3). The small penetrative wounds that were present on both the hind legs, laterals and the rear of the animal appeared to have sufficiently improved with no suppurative wounds, however small localized inflammations were still present.

Overall based on the body condition of the individual and examination of the tail it could be assumed that the individual experienced an uneventful recovery after medical intervention.

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Erratum

Motacilla alba leucopsis Gould, 1838 (Aves: Passeriformes: Motacillidae) - New Record for Odisha, Amaresh Sarangi, T.K.S. Thathachari, Siba Prasad Parida, Ashis Kumar Mohanty and Swetashree Purohit, *Zoo's Print* Vol. XXXI, No. 6, June 2016, Pp. 1-2

Page 1, first photo caption, read as "Amur Wagtail perching on round carved stones" instead of "White-browed Wagtail perching on round carved stones".