

To tusk fracture

Case report

Tusk fracture repair in 9 yr-old male asian elephant

Place: Antwerp Zoo

Date: 2016

Data provided by: Francis Vercammen DVM

History

When chased by a herd mate of the same age and gender, the elephant hit a hard object and fractured its right tusk. The sharp tusk edges had caused minor injuries of the dental sulcus. The pulp tissue was exposed and flushed 3 times per day with a mild disinfectant for 4 days.



Remnant of fractured right tusk and fragments of the distal part of the right tusk. Note the relatively narrow pulp canal at this level of the tusk.

Treatment

The elephant was sedated using:

Detomidine: Domosedan 10 mg/ml

Butorphanol: Dolorex 10 mg/ml

The eyes were covered with cotton gauze patches, attached to the skin with adhesive tape.

The tusk remnant was cut perpendicular and a partial pulpectomy was performed. The pulp tip of the canal was closed following the protocol for tusk fracture repair

The sedation was reversed with atipamezol: Antisedan 5 mg/ml

The sulcus injuries caused by the sharp edges of the fractured tusk ends were treated by daily flushing with luke-warm water and Iso-Betadine Gynecology.

Treatment results

A few days after the treatment of the right tusk, the elephant fractured its left tusk in a similar way. This tusk too was treated by following the same procedure as the right tusk.

Both tusks continued to grow at a growth rate of approximately 10 mm per month.

Tusk fracture repair procedure



Photo of the same elephant 3 years after successful tusk repair.