

Tusk fracture in 36 months old African elephant

Date: 2017

History

The left tusk of a 36 months old calf suffered an injury with an approximately 5-10 cm shell-like piece broken from the dorsal side of the tusk. Pulp tissue was exposed and was bleeding for a while. Bleeding stopped spontaneously.

Treatment

The injured and exposed dental pulp was flushed 3 times daily with luke-warm water and sprayed with a mild disinfectant afterwards.

Treatment results

In the weeks following the treatment, secondary ivory (dentine) was formed by the healthy pulp tissue, which finally resulted in complete closure of the pulp canal and normal growth of the tusk.

In young elephants this conservative treatment can be successful. Fractures in larger tusks usually result in exposure of a larger surface of the pulp tissue, with concomitant secondary infected pulpitis. This will require partial pulpectomy and filling of the distal part of the tusk with glass ionomer cement.

Comment:

Partial pulpectomy and closure of the tip of the pulp cavity is by far preferred over conservative treatment. The risk of locking in pulpitis is high if conservative treatment is elected.



Three months after the fracture of the tusk, the pulp canal was completely filled with new, secondary ivory, leaving only a small black spot. The tusk continued growing normally.