

DIGITAL AMPUTATION FOLLOWED BY SCREW FIXATION OF THE SUBSEQUENT PROXIMAL PHALANX LUXATION IN AN ALPACA STALLION

B. Linsbichler¹, J. Kofler², T. Licka^{3,4}
bernadette.linsbichler@zoetis.com

¹Zoetis Austria GmbH, Vienna, Austria

²University of Veterinary Medicine Vienna, Department of Farm Animals
and Veterinary Public Health, University Clinic for Ruminants, Vienna, Austria

³University of Veterinary Medicine Vienna, Department of Horses & Small Animals,
University Clinic for Horses, Vienna, Austria

⁴University of Edinburgh, Royal (Dick) School of Veterinary Studies,
Edinburgh, Scotland, UK

Digital amputation is the most commonly applied treatment for severe deep digital sepsis involving the distal and proximal phalanges in cattle. To our knowledge there are no previous publications reporting digital amputation and its sequelae in new world camelids. This case report describes the digital amputation through the proximal phalanx (P1) for treatment of septic arthritis of the proximal interphalangeal joint (PIJ) in an alpaca stallion, and the treatment of subsequent luxation of P1 using internal fixation.

A 4-year-old alpaca stallion was presented with severe lameness (3/5 in walk) and an infected, 10×5 cm sized wound on the abaxial aspect of the medial digit of the left front limb reaching from the PIJ to the distal interphalangeal joint. During cleaning maggots, necrotic tissue and fibrin were flushed out. At first, wound debridement, curettage, administration of antibiotics, NSAIDs, and bandage changes every other day was applied. However, after initial improvement and after termination of administration of antibiotics and NSAIDs, lameness re-appeared and a fistula developed. Radiographs showed an axial subluxation of P2 and gas inclusions in the region of PIJ, leading to the diagnosis of septic arthritis of the PIJ in combination with subluxation. Under general anaesthesia, the wound was diligently debrided and the joint flushed. The leg was stabilized with a half limb cast. The fistula healed and the alpaca was discharged showing a mild lameness in walk (1/5) only.

After four weeks of repeated bandage changes and wound management the fistula recurred and instability of the joint was palpated. Radiographs revealed a complete axial luxation of P2 and diffuse areas of radiolucency indicating osteomyelitis of P2 and the distal part of P1. Under general anaesthesia, an amputation through the distal aspect of P1 was performed and the amputation wound was closed with sutures. The wound healed by first intention and the alpaca was free of lameness in walk, pace and gallop for 5 years.

In 2018, the stallion was presented with severe, sudden onset lameness (4/5) of the left front limb in walk. A painful swelling was identified at the lateral aspect of the fetlock joint. Radiographs showed abaxial luxation of P1. Under general anaesthesia, the luxation was treated by internal fixation of the displaced lateral P1 to the remnant of the medial P1 using a cancellous bone screw inserted at their proximal aspects, and by a Robert Jones bandage. After four weeks of box rest the stallion was discharged from the hospital, and after eight additional weeks of box rest with gradual increase of controlled exercise and bandaging, the stallion showed no lameness in walk and pace.

After searching in all available databases (MED-LINE/PubMed, Google etc.), it seems that this is the first report describing digital amputation and its sequelae in an alpaca. Thus initial screw fixation of the remaining P1 at the time of digital amputation is an interesting possibility for future investigations. Despite the worry that alpacas as tylopoda might have problems when walking on one digit, the final, successful outcome is encouraging.

Keywords: ALPACA STALLION, DIGITAL AMPUTATION, LAMENESS