

Tenosynoviotomy as a salvage procedure in a pregnant five-year-old thoroughbred mare

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Septic tenosynovitis is a painful and life-threatening condition that is commonly encountered in equine patients. Causes of sepsis can be haematogenous spread or from penetrating wounds (Honnas 1991; Bertone 1995). Traditionally, treatment of this condition includes regional and systemic antibiotic therapy and surgical treatment including tenoscopic lavage and debridement, needle lavage, or tenosynoviotomy (Wright and Scott 1989; Bertone 1995; Honnas 1991). Few reports have been published reporting on the outcomes of tenosynoviotomy procedures (Chan *et al.* 2000; McNally *et al.* 2013; Wereszka *et al.* 2007), with the most recent being published by McNally *et al.* in 2013 including a case series of nine horses. Due to the radical nature of this technique, it is generally reserved as a salvage procedure and therefore is uncommonly performed.

McNally *et al.* (2013) describe their approach to the procedure which consists of a linear vertical incision extending from five centimeters proximal to the proximal sesamoid bones to two centimeters distal to the bifurcation of the superficial digital flexor tendon (SDFT). This incision is made lateral to the mesotenon and axial to the neurovascular bundle. Once within the digital flexor tendon sheath (DFTS), the palmar/plantar annular ligament and lateral branch of the SDFT are transected. The site is lavaged, debrided and packed to allow healing by second intention, and heel elevation is used to provide support for the flexor tendons. Of the horses available for follow-up, 71% (five) were alive and considered serviceable for their intended use, and owners were satisfied with the cosmetic appearance of the wound once healed. Two were euthanised.

This report describes a five-year old pregnant thoroughbred mare with septic tenosynovitis of the right hind DFTS secondary to a laceration over the plantar pastern. Tenoscopy and aggressive medical management were initiated, however due to persistent sepsis, a tenosynoviotomy was performed using the technique described by McNally *et al.* (2013).

Minor modifications regarding farriery post-operatively were made as a heartbar shoe with adjustable heel elevation and toe extension was placed rather than a wood block. The mare successfully carried her foal to term and is serviceably sound. Complications reported by McNally *et al.* (2013) were not encountered. In our experience this surgical technique was practical and replicable as a salvage procedure in a horse with septic tenosynovitis.

References

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