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FIXED BANDAGE USE IN THE TREATAMENT OF A BAT (NYCTALUS NOCTULA) RADIAL DIAPHYSEAL FRACTURE

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Abstract

In this paper we present a case of a female bat (nyctalus noctula) found with a complete closed fracture in the third middle of the right radius diaphysea. Therapeutic protocol consisted of applying a fixed bandage with a removable plastic splint covered with synthetic adhesive material after providing analgesia and anesthesia. Radiological images after immobilization show correct positioning of the fracture. Post interventional indication was to maintain the bandage for 6 weeks in order to keep the two bone segments (distal and proximal radial) in physiological anatomical relationships, to monitor his integrity and to provide analgesia since it is reported a high degree of auto mutilation. Analgesia was continued for 5 days.

Key words*: fracture, diaphyseal, bandage, analgesia, rat*

INTRODUCTION:

The bat was found unable to fly, presenting a high mobility at the right wing level, at the radial level, along with a circular lesion and crepitating. Diagnostic was establish trough radiological exam: fracture in the third middle of the right radius diaphysea (Winters P., 1996).

MATERIALS AND METHODS

The bat was received in a poor condition. After a physical exam we establish that he needed immediate intervention. The bat was premedicated with butorphanol 5 mg/kg intramuscular and induced with isofluran 5% by mask (fig.1).

Fig. 1 Mask induction with isoflurane

Anaesthesia was maintained with isofluran 2%, for 35 minutes (Grimm, K.A.,2013). Analgesia was continued every 12 hours, for 5 days (Sangster C., 2008). Therapeutic protocol consisted of applying a fixed bandage (fig.2) for a complete closed radius fracture after providing analgesia and anesthesia (James at 2001).

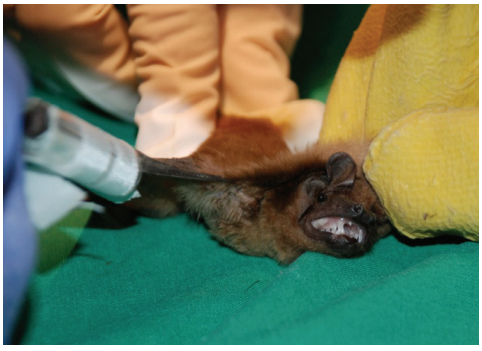

Fig. 2 Fixed bandage with a removable plastic splint

RESULTS AND DISCUSSIONS

Anaesthesia with isoflurane by mask was well tolerate and the recovery was rapid. A fixed bandage with a removable plastic splint covered with synthetic adhesive material was design for the fracture (fig.3, fig.4). Due to the lesion existed at the fracture level we

consider to open the bandage in order to have access to this site. The lesion was cleaned daily with a high cicatrised ointment based on propolis.

Fig.3 Appling the plastic splint

Fig.4. Final aspect of the bandage

Analgesia was continued 5 days after surgery with butorphanol via intramuscular injection. The bat received Duphalyte 5ml/day pers os daily. The patient didn't present any signs of auto mutilation during the treatment.
The radiological exam performed after surgery revealed the correct repositioning of the. Complete callus formation was observed 3 weeks after the intervention.

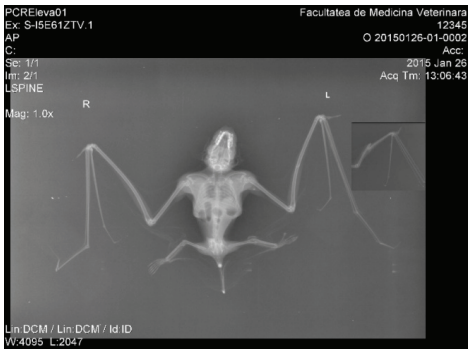

Fig.3 Radiologial exam before (small figure) and after intervention

CONCLUSIONS

Radial fracture in bats can be treated applying a fixed bandage.It is important to choose light materials, well tolerate by the bat's tegument. Analgesia is a very important aspect, since pain can be a stimulus for auto mutilation. Propolis was used with good result for local cicatrisation.

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