

Immobilization of Tibial Fracture in Emu Using Fibreglass

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Case Report

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INTRODUCTION

An emu aged seven months was presented to the clinic with the history of being off-fed, isolated from other birds, non-weight bearing and lameness of the left limb. Clinical examination revealed compound fracture of the left tibia and further radiographic examination confirmed an open, complete and transverse fracture of the proximal end of left tibial bone. The fractured fragments were present in over-riding position. It was decided to manage the case with fibreglass bandaging for immobilization of the fractured tibia.

The emu was anaesthetized with combination of xylazine @ 5 mg/kg b. wt. and ketamin @ 15 mg/kg b. wt. administered i.m. in pectoral muscles ^[1]. Induction of general anaesthesia was found to be observed within two minutes of administration of the drug.

The necrosed tissue and skin around the fracture site were removed and wound was dressed properly with sterilize gauze bandage and bitadine. Affected limb was extended and reduction of bony fragments was performed. Cotton padding was applied on full length of the affected limb and fibreglass cast was dipped in water for one min. and applied over the limb keeping a window at the site of open wound.

Analgesic meloxicam 0.1 ml (0.5 mg) was administered just prior to recovery from anaesthesia and postoperative medication included antibiotic drops cephalexin (100 mg/ml) 2 drops twice daily for 5 days and syrup paracetamol 2 drops once daily for 3 days. The bird started bearing weight on the affected limb next day after surgery (**Figure 1**).



Figure 1. Immobilization of the fractured tibia with fibreglass cast.

Bennett and Kauzma ^[2] reported that avian fractures are often open and frequently comminuted. Many times the bones are small and the patient is fractious and prone to self-trauma. External coaptation (slings, bandages, and splints) has long been a part of avian fracture management. However, fibreglass cast was used to immobilization in present case. Avian fractures heal in the same manner as those in mammals ^[3] and the rate at which the bone heals is slightly faster than in mammals. In the present study the clinical signs of union were observed between 20 to 25 days of immobilization. The repair of avian fractures is difficult because of a large medullary cavity and thin cortices ^[4]. Since the fractures were unstable in nature, casting was applied to provide adequate immobilization. Gahlot et al. ^[5] have reported repair of tibial fracture in a peacock using intramedullary pinning. However, in present case, it was managed with fibreglass casting.

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