RETROGRADE INTRAMEDULLARY PINNING FOR SUCCESSFUL SURGICAL MANAGEMENT OF FEMORAL FRACTURE IN A CAT



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A clinical report submitted in fulfillment of the requirements for the degree of Doctor of Veterinary Medicine (DVM)

CHATTOGRAM VETERINARY AND ANIMAL SCIENCES UNIVERSITY KHULSHI, CHATTOGRAM-4225.

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List of Abbreviations

Abbreviation	Elaboration
IMP	Intra medullary pinning
PCV	Packed cell volume
RBC	Red blood cell
WBC	White blood cell
mg	Miligram
%	Percentage
CVASU	Chattogram Veterinary And Animal Sciences University
TTPHRC	Teaching and Training Pet Hospital And Research Centre

Abstract

In Bangladesh, the cat population is gradually expanding, as is the high rising syndrome, which is the leading cause of various fractures in cats. Nowadays, a variety of fracture management techniques are used to correct various fractures depending on their nature. The current case study highlights the effective surgical treatment of a right femur fracture in a cat. An approximate 3-month-old female of a 2.2 kg body weight cat was carried to Pet hospital (TTPHRC) with a history of falling from the 5th floor of a building. The clinical and radiological investigation demonstrated that the cat was suffered from a complete transverse distal diaphyseal fracture of the Right femur and the fracture was a closed fracture. The case was recommended to perform internal fixation by retrograde intramedullary pinning for femur fracture treatment based on the fracture patient assessment score (FPAS). To assess the patient's status, a complete blood count (CBC) and serum biochemistry were conducted before fracture management. The patient was prepared aseptically and surgery was performed as a standard surgical procedure with xylazine and ketamine anaesthesia. Retrograde intramedullary pinning (IMP) with a 3.0 mm Steinmann pin was used to repair femur fractures. The patient was evaluated at various intervals after surgery to assess lameness, functional limb result, and bone healing of the damaged limb. On the 14th postoperative day, there was mild weightbearing, a secondary callus development, an implant in place, and a fracture gap. The amount of serum alkaline phosphatase increased during the bone healing process, especially in the second and third weeks after surgery. Finally, the patient's surgical efficacy was assessed through a phone conversation two months after surgery, which indicated a playful living for the cat and a very happy owner. So, our case study concluded that retrograde intramedullary pinning was an efficient way of femur fracture treatment for Cat, and that pin removal was not required if no complications happened.

Keywords: Femoral Fracture, Diaphyseal, Retrograde Intramedullary pinning, Radiographic examination.