

## Management of complete fractures due to automobile accident in calves

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Various reduction and fixation techniques have been introduced for the treatment of different types of fractures. But there has been no consensus on the fixator and implant that can provide the most suitable conditions for fracture healing in calves. Therefore, this study was planned to evaluate two methods of fracture treatments in calves having complete fractures due to automobile accident. In this study, 8 cases were treated with closed reduction with external fixation using bamboo splints and plaster of Paris. Open reduction with internal fixation using stainless steel orthopaedic wires and modified Thomas splints were used to treat 12 fractures in long bones of calves. All calves treated with open reduction and internal fixation showed good weight bearing in the immediate post-operative period. The fixators applied to different bones were well-tolerated, and the animals could lie down, stand and walk freely with the fixator without any problems after 60 days. Post operative radiography confirmed that bone fragments were well maintained until healing occurred. There was no periosteal reaction around the wire suture at the fracture site. No exudation was observed at surgical site in any calves during removal of suture. In contrast, two calves cured among 8 calves treated with closed reduction and internal fixation. This study revealed that wire suture provided good alignment and stabilization of fracture fragments, rapid union of fracture resulted in early functional usage of limb. The results of this study exemplify the successful use of wire sutures in the treatment of complete fractures of the long bones in calves.

## Biography

Nasrin Sultana Juyena is working as an Associate Professor at the Department of Surgery and Obstetrics, Faculty of Veterinary Science, Bangladesh Agricultural University, Mymensingh, Bangladesh. She completed her PhD on ram and alpaca semen cryopreservation in 2011 from University of Padova, Italy. She has published more than 20 papers in reputed journals. Her research interests are in the area of orthopaedic surgery and ruminant reproduction.

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