

ABSTRACT.

The use of medetomidine-tiletamine-zolazepam anaesthesia with brachial plexus blockade is reported as an alternative anaesthetic technique for repair of radius and ulna fractures in dogs. A 3 years old male Japanese spitz was presented with a history of leg carrying lameness following a car accident 2 weeks earlier. Clinical examination revealed non-weight bearing lameness of the right forelimb and normal physiological parameters. Radiography confirmed a complete oblique fracture of the proximal right radio-ulna bones which required open reduction and internal fixation. Two anaesthetic protocols were attempted but resulted into severe apnea and bradycardia. The first regime involved the use of xylazine-thiopentone-isoflurane while the second one was xylazine-ketamine combination. An alternative anaesthesia protocol involving medetomidine-tiletamine-zolazepam combination with brachial plexus block using lidocaine was employed with great success. Analgesia of the desensitized limb extended 7 h post-operatively. Temperature and cardio-pulmonary parameters remained stable intra-operatively as indicated by an average temperature of 37.2°C, heart rate of 68 beats min⁻¹ and respiratory rate of 18 breaths min⁻¹. This study reports successful use of medetomidine-tiletamine-zolazepam anaesthesia with lignocaine brachial plexus blockade in orthopedic procedures involving the forelimbs in dogs.