

# ANIMAL HEALTH & VETERINARY MEDICINE

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## Time depend effect of isoflurane anaesthesia on total antioxidant capacity in calves

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The aim of this study was to investigate the effect of isoflurane on total antioxidant capacity in calves. The research was carried out on 15 calves, from newborns to 3-months-old, in operations performed for a variety of reasons. For induction, isoflurane was given at 3-5% concentration via mask during 15 minutes. Then, endotracheal intubation was performed and the maintenance was set to a concentration of 1.5-3% isoflurane in 100% oxygen two hours period. Blood samples were taken at 30 and 75 minutes, after the induction, before of anaesthesia, during two hours isoflurane anaesthesia and total antioxidant capacity were evaluated. Blood samples were centrifuged at 3500 rpm for 10 minutes at +4°C and the serum samples were obtained. The samples were maintained at -20°C until analyses. Total antioxidant capacity (TAC) was determined using commercial kits using a spectrophotometer (Eo Biotex, USA). There was no significant difference recorded on TAC during isoflurane anaesthesia. It was determined the isoflurane anaesthesia had no adverse effect on total antioxidant capacity in calves.

### Biography

Selvinaz Yakan has graduated at the Faculty of Veterinary Medicina Firat University, Turkey. She completed her PhD research on the comparison of the effects of isoflurane and sevoflurane general anaesthesia after induction by propofol on clinical and physiological measurements in calves, Kafkas University, Department of Surgery, Faculty of Veterinary Medicine, Turkey. She currently holds a post at the Department of Animal Health, Agri Ibrahim Cecen University of Eleskirt Celal Oruc Animal Production School, Agri, Turkey. She is an expert in large ruminant surgery and clinical sciences.

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