



Jayakrushna Das

Odisha University of Agriculture & Technology, India

Safe surgical management of complicated surgeries using general Anaesthesia with zolazepam tiletamine and isoflurane combinations in bovines

Bovines are good subject for interference with many of the surgical procedures safely & humanely adopting a combination of physical restraint, mild sedation, tranquilisation and local or regional anaesthesia. The standing procedure of bovines irrespective of age, sex and health status reduces the incidences of tympany, bloat, salivation and recumbency related to regurgitation and musculo-skeletal (tissue, muscle) damages. Among different local anaesthetic (LA) agents, Lignocaine HCL is the most widely used LA in animal practice. The anaesthetic activity of this agent can be practised in reduction of toxicity when added with epinephrine @ 5-20 mcg/ml. The permeability and infiltration of this agent also increased by adding Hyaluronidase @ 150 TRU (Turbidity reducing unit) / 50 ml. The full term Caesarean section, rumenotomy, horn amputation, amputation of limb / digit, intestinal surgeries and other such standard operations can be done by using regional anaesthesia and different types of nerve blocks. But the complicated urolithiasis, cystotomy, DH, complicated abdominal & pelvic surgeries, complicated fracture managemens which require more time and steady vigilance of vital parameters may not be performed painlessly and humanely without adopting general anaesthesia (GA) either by injectable or using inhalation anaesthesia. The complicated operations need GA with pre anaesthetics e.g. Xylazine HCL @ 0.1 mg / kg bwt., guifenesin (centrally acting muscle relaxant) @ 50 mg/ml in dextrose solution given at 2 ml / kg i/v followed by ketamine HCL @ 2 mg / kg i/v or Zoletil™ (Tiletamine + zolazepam) @ 3.5 – 4 mg / kg bwt i/m. When the animals brought to the stage of relaxation of involuntary muscle at second stage of anaesthesia the animals were intubated with lubricated endo-tracheal (ET) tubes using sizes of 10-14 numbers (24-26 mm) with moderate inflation so as to properly fit the inner diameter of bovine trachea. The anaesthesia was maintained with isoflurane MAC 1%. The animals were maintained well and co-operative during the time of operations without showing any marked adverse effects. These practices were in use with the bovines like *Bos indicus* (zebu cattle) & *Bos taurus* (domestic & exotic cattle).

NB: Zoletil™ of Virbac Animal Health India pvt. Ltd.

Biography

Jayakrushna Das is a 29 years of experience person after MVSc in the field of veterinary extension, research, animal (pet, domestic and wild) treatment, teaching & training. He has over 86 research articles and 387 abstract publications and he has published over 5 books in the field of veterinary surgery & radiology. He is currently working as professor, Dept of veterinary surgery & radiology at the college of veterinary science and animal husbandry and serving as a member of the editorial board at Orissa Veterinary Journal.

drjohndasjajpur@gmail.com