Ventral Abdominal Hernia in a Goat

P.S. Jettennavar, G.P. Kalmath* and M.C. Anilkumar

Veterinary Hospital Gadag,
Department of Animal Husbandry and Veterinary Services, Karnataka
* Corresponding author

Hernia is the protrusion of an organ or tissue through an opening (Tiwari, et. al.,2004). The opening may be caused by a tear in the abdominal wall or it may be a natural opening like the inguinal canal or femoral canal (Kemparaja, 2003). Ventral abdominal hernia is a common acquired condition in ruminants. (Tiwari, et. al.,2004). Any trauma caused by horn thrust, kick or violent contact with blunt objects or by an abdominal distension due to pregnancy or violent straining during parturition may lead to ventral hernia (Krishnamurthy, 1995). Ventral hernia invariably results due to a serious injury to the muscular portion of the abdominal wall (West, 1977). This is common in dog and pig, less so in the other domestic species.

History and Clinical Examination

A nondescript doe aged around four and half years was presented to the veterinary Hospital, Gadag, with the history of blunt injury and large palpable swelling at the left ventral abdominal region. Upon clinical examination, there was a small-lacerated wound at the left ventral abdomen. When attempts were made to feel the swollen part with the finger, it was found to be reducible. A clear-cut hernial ring of about two and half inch was felt on pushing the content in to the abdominal cavity. The case was diagnosed as ventral abdominal hernia.

Surgical correction and Post-operative care

The patient was laid in the dorsal position, to have best exposure of the site. After the preparation of skin for aseptic surgery, caudal epidural anesthesia was accomplished by injection of 3 ml of 2% lignocaine hydrochloride epidurally in between last sacrum and first coccygeal vertebrae. An oblique incision over swelling on left ventral abdomen was taken and the skin edges were refracted and separated from the peritoneal sac up to the hernial ring by blunt dissection to visualize the hernial mass. Ventral hernia is usually associated with the torn parietal peritoneum and subcutaneous prolapse (Berge and Westhues, 1996). but in the present case, the parietal peritoneum was intact. After the hernial contents were reduced through the hernial ring, peritoneal sac was ligatured close to the hernial ring and was amputated distal to the ligature. The ligatured stump after amputation was pushed into the abdomen and the hernial ring was closed using overlapping mattress sutures (Lakshmipathy, 1975). Cutaneous incision was closed by vertical mattress suture using braided silk and the wound was covered with Tincture Benzoin seal.

Post-operatively surgical wound dressing, intramuscular antibiotic and analgesic injections with 3 ml of Dicrysticin-S (diluted in 7.5 ml distill water) and 5 ml of Vetalgin for consecutive five days was fallowed. After three days surgical wound developed edema, which was drained off by removing one of the suture in the dependent part and the cavity was inserted with the dressing gauge soaked in Tincture iodine. The sutures were removed on 10- post operation day after ensuring the complete healing of the operated wound.

Discussion

The incidence of ventral hernia in animals (Bovines and Ovines) accounts for 32.3% (Nagaraj, et. al., 2004). Though it is a common condition, it is generally ignored by the rural farmer community unless it results in some serious symptoms. Though, exact cause of the hernia in the present case could not be traced, it would have been occurred due to falling on the blunt object as there was no open injury at the site of hernia.

Acknowledgement

The authors are thankful to Dr. V.G. Bhandi, Assistant director, A.H. and V.S., Gadag, Karnataka, for providing the necessary facilities and for according permission to publish this article.

References

- Berge and Westhues.(1996): Veterinary operative surgery. Medical Book Company Boulevard, Denmark. p. 229.
- 2. Kemparaja. (2003): Indian. Vet. J., 80:707-708.
- Krishnamurthy, D. (1995): In ruminant surgery, Ed By Thyagi and Jit Singh, C.B.S. Publishers and Distributors New Delhi.
- 4. Lakshmipathy, G.V. (1975): *Indian. Vet. J.*, 52:654-658
- 5. Nagaraj, B.N., et.al.(2004): Indian. Vet. J., 81:74-75.
- 6. Tiwari, S.K., et.al. (2004): Indian. Vet. J., 81:695-696.
- West, G.P. (1977): Black's Veterinary Dictionary.12th Edn. E.L.B.S. Adam and Charles Black London. p. 361.