and muscle relaxation during the surgical procedure in this case. Recovery from anaesthesia was relatively smooth, with minimal complications as also reported by Al-Sobayil et al., 2009, and was complete 10 minutes after discontinuing isoflurane. It could be concluded that induction of anaesthesia with ketamine followed by maintenance with isoflurane produced sufficient anaesthesia for performing surgical operations with smooth recovery in Emu.

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References


Management of Hydrallantois in a Crossbred Jersey Cow by Transcervical Allantocentesis

C.Velladurai1, R.Ezakial Napoleone and M.Selvaraju

Department of Animal Reproduction Gynaecology and Obstetrics, Veterinary College and Research Institute, Namakkal - 637 002.

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Abstract

A six month pregnant crossbred Jersey cow was reported with history of sudden bilateral distention of abdomen. Based on history, vaginal and rectal examination the case was diagnosed as hydrallantois. It was subjected to allantocentesis by fixing rusch catheter at internal os of cervix to drain allantoic fluid slowly and pregnancy was terminated with cloprostenol and dexamethasone. The allantoic fluid was drained out in 24 hours and a dead female fetus was delivered by simple traction.

Key words: Allantocentesis, Hydrallantois, Cow.

Hydrallantois is gestational disorder with sudden increase in allantoic fluid occurring in allantoic cavity due to fetal membrane pathology leading to bilateral enlargement of abdomen. This is more common in last phase of third trimester in dairy and beef cattle and less in buffaloes and heifer (Srinivas and Sreenu, 2006). Excessive accumulation of allantoic fluid in allantoic sac occurs as a single pathological factor in 85-90% of dropical conditions affecting fetus and its membranes in bovines (Roberts, 1986 and Youngquist, 1997). Hence, this present communication represents a case of hydrallantois and its management in a crossbred Jersey cow.

Case History and Observations

A 7 years old crossbred Jersey cow was presented with history of six month pregnant and sudden bilateral distention of abdomen (Fig. 1),
anorexia, respiratory distress, expiratory grunt, difficulty in getting up and constipation for one week. The animal was dull and depressed with sunken eye balls and dry muzzle. The physiological parameters such as pulse rate, respiratory rate and rectal temperature were within physiological limit. Vaginal examination revealed patent vaginal passage, absence of vaginal discharge and intact cervical seal. Rectal examination revealed enlarged and fluid filled uterus occupied the entire abdominal cavity and difficulty in palpating the fetus. Based on history, symptoms and observations, this case was diagnosed as hydralantois.

**Treatment and Discussion**

To avoid shock due to sudden release of allantoic fluid, rusch catheter (18") was introduced into the allantoic cavity through cervix after negotiating cervical canal with cervical dilator (Fig. 2). Termination of pregnancy with inj. Cloprostenol (500 ug, I/M) and inj. Dexamethasone (40 mg, I/M). 92 liters of allantoic fluid was slowly drained through rusch catheter for a period of 24 hours and the abdominal size was reduced (Fig. 3). The drained allantoic fluid was watery and amber colour. Cervix fully dilated in 48 hours. After removal of allantoic fluid, a dead female fetus was delivered by simple traction. The diseased placenta was removed manually. Following fetal delivery inj. Calcium borogluconate (450 ml, i/v) and inj. Oxytocin (40 IU, i/v) were administered. The animal was treated with inj. Enrofloxacin (2000 mg, i/m), inj. Meloxicam (225 mg, i/m), inj. DNS (3 liters, i/v), inj. Ringer lactate (3 liters, i/v) and inj. Chlorpheniramine maleate (225mgm, i/m). The antibiotic, antihistamine and fluids were continued for one week and dam recovered uneventfully. Hydralantois was seen mostly in 8-9 month of pregnancy (Roberts, loc.cit). However in present case it was seen in six month of pregnancy and could be due to necrosed and oedematous placenta as reported by Napolean et al., (2012). The shifting of fluid from interstitial tissue or cell to allantoic cavity might have been responsible for dehydration, sunken eyes, dullness and depression in present case (Arthur et al. 1989). In this
case, the rusch catheter was used to drain out allantoic fluid slowly over a period of 24 hours, similar procedure was reported by Napoleon et al., (loc.cit) in a cow. The hydronephrosis of fetect kidneys could result in polyurea which may also cause excessive accumulation of fluid inside the allantoic cavity. In the present case tough and leathery placenta (Fig.4) and cystic enlarged hydronephrotic fetect kidneys (Fig.5) were observed as Roberts (loc.cit). The continuous treatment following fetect delivery would have avoided the post hydrops complications and early recovery of the cow.

References