www.ThePharmaJournal.com

The Pharma Innovation



ISSN (E): 2277- 7695 ISSN (P): 2349-8242 NAAS Rating: 5.03 TPI 2018; 7(4): 561-562 © 2018 TPI www.thepharmajournal.com Received: 27-02-2018 Accepted: 29-03-2018

J Shiva Jyothi

Department of Veterinary Microbiology, College of Veterinary Science, Rajendranagar, Hyderabad, Telangana, India

Kolipaka Rajesh

Department of Veterinary Physiology, College of Veterinary Science, Rajendranagar, Hyderabad, Telangana, India

Correspondence Kolipaka Rajesh Department of Veterinary Physiology, College of Veterinary Science, Rajendranagar, Hyderabad, Telangana, India

Cesarean section in canine: Case report

J Shiva Jyothi and Kolipaka Rajesh

Abstract

A case of dystocia was presented to people for animal (PFA) the owner has reported that the dog has whelped two pups and is still under pain so when the animal was examined fetal bony structures can be felt by palpation so a cesarean section was performed to relieve the animal from pain and remove the fetus.

Keywords: C-section, dystocia, whelping,

Introduction

The frequency of conducting cesarean section to relieve dystocia in canine is far higher than in large ruminants. It is possible that the small size of the animal, multiparous nature, a long duration of delivery and the demands by the owner to deliver as many live puppies as possible due to commercial considerations may force the obstetrician to increasingly employ cesarean section in bitches. Narasimha murthy et al., 2014 [10]. Cesarean section is performed on an emergency basis 58% of the time. Dehydration, hypovolemia, hypotension, exhaustion, hypothermia, toxemia, hypoxia, hemorrhage, and shock may be present if dystocia has been in progress for some time. There is an increased mortality risk for dams and decreased puppy survival when cesarean section is performed on an emergency basis Moon et al. 1988. Puppy mortality associated with emergency cesareans was 12.7% compared with 3.6% for elective cesarean delivery Moon-massat 2005 Small brachycephalic breeds (e.g., fetopelvic disproportion), large breeds (e.g., uterine inertia), and primagravid dogs are more predisposed to dystocia and are, therefore, more likely to undergo emergency cesarean section Gaud et al 1985^[6]. A variety of anesthetic protocols have been described for cesarean section in dogs. The basis for many of these protocols is extrapolated from experimental animal studies and the human literature. There are few controlled veterinary studies comparing various anesthetic protocols (Funkquist et al. 1997; Thurmon et al. 1996; Brock N 2000, 1996; Paddleford 1992 Benson Gj1984; Evers 1996; Luna et al. 2004)^[5, 12, 2-3, 11, 1, 7]

Results and discussion

Cases of dystocia that could not be relieved through vaginal manipulative procedures was immediately subjected for caesarean section, since It was also the only line of treatment carried out in protracted cases of dystocia characterized by fetal death. In the present study, dystocia could be relived only by cesarean section and fetus was found be dead (Fig1, Fig2). The surgical approach was carried out by anaesthezing the animal using xylazene and ketamine @ 1mg/kg body weight and 10mg/kgwt respectively. Uterine suture were continous suture pattern was employed for closing both the uterine and abdominal incison, followed by interrupted suturing pattern for skin. Postoperative care was carried out by using a prolonged antibiotic therapy with intacef, melonex, tribivet, followed by regular dressing on every alternate day. The animal was under supervision till days 10 after surgery. A good recovery with no complications was observed (Fig4).



Fig 1: Uterine Body with Dead Fetus



Fig 2: Dead Fetus



Fig 3: Continous Suture Pattern



Fig 4: Interrupted Suture Pattern

Conclusion

Our study aided in strengthening the performance of c-section at critical time points wherein whelping fails to relieve the animal from suffering.

References

- 1. Benson GJ, Thurmon JC. anesthesia for cesarean section in the dog and cat. Mod vet pract. 1984; 65:29-32.
- 2. Brock N. anesthesia for canine cesarean section. Can vet j 1996; 37:117-118.
- 3. Brock N. veterinary anesthesia update: guidelines and protocols for small animal anesthesia, ed, vol. Canada, veterinary anesthesia northwest, 2000, 1(2).
- 4. Evers WH. epidural anesthesia in the dog: a review of 224 cases with emphasis on cesarean section. Vet med small anim clin. 1968; 63:1121-1124.
- 5. Funkquist Pm, Nyman Gc, Lofgren Aj, *et al.* use of propofol-isoflurane as an anesthetic regimen for cesarean section in dogs. Javma. 1997; 211:313-317.
- Gaudet da. retrospective study of 128 cases of canine dystocia. Jaaha. 1985; 21:813-818.
- 7. Luna Sp, Cassu Rn, Castro Gb *et al.* effects of four anaesthetic protocols on the neurological and cardiorespiratory variables of puppies born by caesarean section. Vet rec. 2004; 154:387-389.
- 8. Moon pf, Erb hn, Ludders jw *et al.* perioperative management and mortality rates of dogs undergoing cesarean section in the United States and Canada. Javma. 1998; 213:365-369.
- Moon-massat pf, cesarean section. in slatter dh (ed): textbook of small animal surgery, ed 3. Philadelphia, saunders, 2003, 2597-2602.
- Narasimha murthy, Devaraj M, Krishnaswamy A, Honnappa TG. Relative Efficacy Of Various Treatment Procedures Employed To Relieve Dystocia In Canines Department of Veterinary Gynaecology and Obstetrics Veterinary College, Hebbel, Bangalore. Indian Journal of Animal Reproduction, 2014, 35(1)
- Paddleford RR. anesthesia for cesarean section in the dog. Vet clin north am small anim pract. 1992; 22:481-484.
- 12. Thurmon Jc, tranquilli Wj, benson Gj *et al.* lumb & jones' veterinary anesthesia, ed 3. Baltimore, Williams and Wilkins, 1996.