

Dystocia in Pakistani Bully Bitch due to Fetal Anasarca Specific to Temporal Region

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ABSTRACT

The report presented a case of dystocia due to fetal anasarca in Pakistani Bully bitch was successfully treated by caesarean operation. A Pakistani bully bitch, which had delivered one puppy 6 h before, was presented to institute clinic with the history of continuous straining. Per-vaginal examination revealed presence of both hind limbs of foetus lodged in the birth canal, which failed to come out despite lubrication and moderate traction. Radiographic investigation revealed the presence of 4-5 foetal skeletons in the uterus. Hence the caesarean section was performed under general anaesthesia using atropine, xylazine and ketamine combinations. Four live and one malformed fetus were delivered. The malformed fetus was affected with anasarca, especially around the temporal region of the head and was obstructed in the birth canal. The bitch was recovered uneventfully following routine post-operative treatment.

Keywords: Fetal anasarca, Dystocia, Pakistani bully bitch, Caesarean

CASE HISTORY AND OBSERVATIONS

A two years old Pakistani Bully bitch was presented to institute clinic with history of delivery of one pup 6 hours ago. There was continuous straining since morning but the bitch was unable to deliver the fetus. The animal was dull and depressed, feed intake was reduced but water intake was normal. The general vital clinical parameters were normal. Per vaginal examination revealed presence of both hind limbs of fetus in the genital passage. The (left or right) lateral abdominal radiography revealed presence of 5 fetal skeletons in the uterus (Fig. 1).

TREATMENT

An attempt was made to induce uterine contractions through administration of Inj. Oxytocin (30 IU, I/V in 250 ml of Normal Saline) and Inj. Calcium sandoz (3 ml, I/V & 3ml S/C) and later the bitch was allowed to move for 15-20 minutes. The animal was examined per vaginal, but there was no further progress to second stage of labour. Hence, it was decided to perform caesarean section. The caesarean section was performed following standard procedure (Moon *et al.*, 1998). During caesarean section, a large sized abnormal dead anasarca fetus (Fig. 2 & 3), appeared obstructing the birth canal along with four live fetuses were delivered. The caesarean incision was closed as per standard

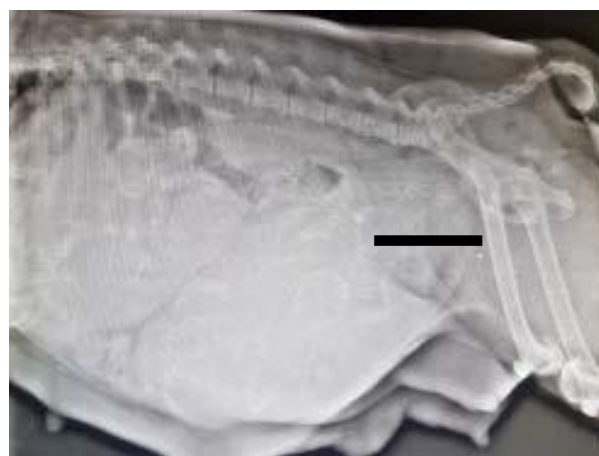


Fig. 1: Radiograph showing the anasarca fetus in the passage



Fig. 2: Fluid accumulation specific at Temporal Region



Fig. 3: Anasarcus fetus

procedure. The abnormal fetus was affected with anasarca (Fig. 3) especially around temporal region of the head (Fig. 2). It showed the subcutaneous oedema of face and abdominal cavities.

DISCUSSION

Developmental anomalies may lead to failure of fetal expulsion necessitating caesarean section in domestic animals. Fetal anasarca, a congenital condition, causing difficult birth may result from an imbalance in the homeostasis of the fetal fluids (Lumbers *et al.*, 2001). The litters of primipara bitches are at higher risk of developing fetal anasarca (Hopper *et al.*, 2004). Accumulation of fluid in body may occur due to improper protein metabolism fluid imbalance or abnormalities of blood vessels or lymphatic system (Cunto *et al.*, 2015). The condition is generally associated with nephrotic syndrome, hypoproteinemia or liver failure, often results from

infectious canine hepatitis. Puppies generally are stillborns or die within 48 hours. The puppies born with anasarca are commonly known as walrus puppies, swimmer puppies, rubber puppies or water puppies as they have large amount of fluid under their skin when they are born. This condition is life threatening and is very common in brachycephalic breeds, such as English Bulldogs, Pugs, Boston Terriers and Bull Mastiffs.

CONCLUSION

A case of successful management of dystocia due to fetal anasarca in a Pakistani Bully bitch by caesarean section is reported.

REFERENCES

- Cunto, M., Zambelli, D., Carolina, C. and Bini, C. (2015). Diagnosis and treatment of foetal anasarca in two English Bulldog puppies. *Pak. Vet. J.* 31: 251-253.
- Moon, P.F., Erb, H.N., Ludders, J.W., Gleed, R.D. and Pascoe, P.J. (1998). Perioperative management and mortality rates of dogs undergoing caesarean section in the United States and Canada. *J. Am. Vet. Med. Assoc.* 213(3): 365-369.
- Lumbers, E.R., Gunn, A.J., Zhang, D.Y., Wu, J.J., Maxwell, L. and Bennet, L. (2001). Non-immune hydrops fetalis and activation of the renin-angiotensin system after asphyxia in preterm fetal sheep. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 280: 1045-1051.
- Hopper, B.J., Richardson, J.L. and Lester, N.V. (2004). Spontaneous antenatal resolution of canine hydrops fetalis diagnosed by ultrasound. *J. Small Anim. Pract.* 45: 2-8.