UTERINE DISPLACEMENT THROUGH A HYSTEROCOELE IN A PREGNANT BITCH

A.H. Bhat¹, M.K. Shriram, M.M. Khan, K. Singh¹, S.A. Bhat, S.S. Siddhu² and N.A. Sudhan³

¹Assistant Professor, ²Director Clinics, Teaching Veterinary Clinical Complex; ³Professor & Head, Clinical Medicine Department; Khalsa College of Veterinary and Animal Sciences, Amritsar-143001(Punjab).

[Received: 05.4.2016; Accepted: 14.10.2016]

Uterine displacement due to an accident in a full term bitch is explained. Abdominal ultrasound revealed the presence of dead foetuses on the right side of the ventral abdomen. Caesarean section was performed when the bitch did not respond to the drugs used for induction of parturition and four dead foetuses were extracted out followed by repair of hysterocele.

Keywords: Uterine displacement, Ultrasound, Caesarean section, Hysterocele.

Uterine displacement is very rare condition seen in bitches, which mainly occurs due to accidents causing rupture of pre-pubic tendon and damage to the pubic attachments of the abdominal muscles leading to the displacement of the gravid uterus. Enlargement of the abdomen occurs on the side towards which the displacement has taken place which can be easily palpated by the obstetrician. In this case there was right side uterine displacement (Fig.1).

Case history and Observation

A two year old non-descript pregnant bitch was presented to TVCC, Khalsa college of veterinary and animals sciences, Amritsar with a history of accident, the previous day by a vehicle leading to right side displacement of the gravid uterus. The bitch was anorectic, lethargic with no signs of parturition and was unable to walk, however physical examination of the bitch reveals no abnormality of the locomotor system. Abdominal palpation revealed the presence of 2-3 foetuses on the right side of the abdomen which was then confirmed by ultrasonography, on per vaginal examination no fetus was found in the passage.

(Fig: 1) Right side abdominal displacement of gravid uterus in bitch
(Fig: 2) Extraction of fetus from incised uterine horn

Treatment

Bitch was given fluid therapy with NSS 500ml and DNS 500ml I/V. Inj. Calcium Sandoz 2.5ml I/M, Inj. Dexona 1.5ml I/M were administered and then repeated after 30 minutes when vaginal examination was performed which revealed slight relaxation of vaginal tract, loosening of vulvar musculature and greenish discharge but no fetus was palpable in the birth canal. To accelerate the rate of whelping, inj. Pitocin 2 IU slow I/V through NSS was given. After 30 minutes, second dose of Pitocin was administered as no fetus was found in the passage. Given medicinal treatment proved in vain, so preparations were made for caesarean section. Caesarean section was performed using Atropine sulphate (0.04mg/kg BW),
xylazine (1mg/kg BW) and ketamine (5mg/kg BW). Before operation prophylactic antibiotic (Inj. Inimox forte300mg) was given. By placing the bitch in supine position surgical site was prepared aseptically and ventral midline incision was given by using scalp blade. Gravid uterus was found on the right side of the abdomen and some part of it was protruding through the ruptured muscle. Small incision was made on the uterus and four dead foetuses were removed (Fig 2 & 3). Uterine lavage was carried out using isotonic solution and metronidazole solution and the incision line was sutured by applying lambert suture pattern using 2-0 chromic catgut. Hernial sac was closed, excessive tissue trimmed off, dead space reduced and margins opposed (Fig 4), using 2-0 chromic catgut in a simple interrupted pattern. Laparotomy incision was closed anatomically and post operative treatment was given to the bitch using fluids (NSS and DNS), antibiotics, anti inflammatory agents for a week to prevent peritonitis. The bitch made unremarkable recovery and started eating after 3-4 hours.

(Fig 3): Four dead fetuses extracted by C.S

(Fig: 4) Hernial sac

Discussion

Accidents in pregnant bitches may cause rupture of pre-pubic tendon which can lead to uterine displacement. Little can be done if there is complete rupture of the pre-pubic tendon and abdominal muscle which leads to death of foetuses as also reported by Jackson (2004). Condition gets worsened if there is uterine rupture which can lead to ectopic presence of foetus; in this case there was no rupture of uterus. Various reasons have been given by authors for uterine displacements. In the majority of cases a severe blow to the abdominal wall is the exciting cause, although many observers have stated that it may occur without traumatic influence, the abdominal musculature becoming in some way so weakened that it is unable to support the gravid uterus. It generally commences as a local swelling about the size of a football but rapidly enlarges until it forms an enormous ventral swelling extending from the pelvic brim to the xiphisternum as also mentioned by Jackson (2004).

In this case there was protrusion of a part of uterus through an opening (Hysterocoele) that was caused by a tear in the abdominal muscle due to an accident. Surgical management of hysterocoele consist of identification of hernia sac, assessment of viability of hernia, surgical resection of non-viable tissue and hernioraphy, it is accordance to Alireza et al. (2009). Complications in surgically treated hysterocoele include incisional infection wound dehiscence, heamotoma, excessive post-operative swelling, sepsis or peritonitis and death as also narrated by Alireza et al. (2009). No complications were encountered in this case.

References
