UTERINE RUPTURE AND ECTOPIC PREGANCY IN A MARE

By

M.S. HASSAN; I.M. GHOHNEIM and K.A. FARAG

Department of Theriogenology and Department of Surgery, Anaesthesiology and Radiology Faculty of Veterianry Medicine, Cairo University.

(Received 26/1/1994.

SUMMARY

A case of uterine rupture and ectopic pregnancy in a mare was diagnosed. The physical examination showed an alert and responsive animal. The rectal examination revealed a nearly full term alive fetus in the abdominal cavity still surrounded by all of the placental membranes. Vaginal examination showed a widely dilated and an empty uterus. After examination, abdominal contraction became more stronger and uterine prolapse occured. An incision was made in the prolapsed uterus to pull the fetus out and hysterectomy was performed.

INTRODUCTION

Ectopic pregnancy means pregnancy outside the uterus. According to the nutritive relation of the placenta, Roberts (1971), classified extrauterine pregnancy into true extrauterine and false or secondary extrauterine pregnancy. The main cause of the secondary extrauterine pregnancy is the uterine rupture (Pearson and Denny, 1975).

There are few reports about the rupture of the equine uterus. Causes of uterine rupture include iatrogenic, uterine torsion, dystochia, fetal malpresentation and protruding fetal bones, secondary complications include herniation of uterine contents into the abdominal cavity, peritonitis from contamination of the abdominal cavity by the uterine contents and haemorrhage (Fischer and Philips, 1986).

History and clinical findings:

An eight years old mare was referred to the Obstetrics Clinic, Faculty of Veterinary Medicine, Cairo Unviersity. The owner observed presence of slight bloody discharge from the vagina asociated with abdominal straining one day before the admission to the clinic. The mare was preganant according to the owner's history but the day of mating was unknown. On physical examination, the animal was alert and responsive.

Rectal examination was adopted to determine the stage of pregnancy and fetus viability. On rectal palpation, a nearly full term fetus was more cranial than would be expected normally and was more easily palpated through the rectal wall. The tentative diagnosis was uterine rupture with the fetus free in the abdomen and was surrounded by all of the placental membranes.

Mnual vaginal examination showed a widely dilated cervix and an empty uterus. the uterus was thoroughly examined for any rupture, but it was completely intact. After examination, abdominal contractions became more stronger and uterine prolapse occured (Fig. 1a). The uterus was completely intact with the presence of a recent healing area which appeared as star like branches.

Treatment:

The animal was sedated with sparine* (1mg/kg bwt.). IV and posterior extradural analgesia was performed using xylocaine ** 2%. The prolapsed uterus was thoroughly washed with mild antisep-

^{*} WYETH Laboratories inc. U.S.A.

^{**} ASTRA-SWEDEN.

tic (Acriflavin 1:1000). An incision was made in the uterus and allanto-amnion was exposed (Fig. 1b). The allanto-amnion was incised to pull the fetus to outside (Fig. 1c). The prolapsed uterus was resected according to Roberts (1971). The uterine stump was closed with Lembert pattern of suture with 2/00 vicryl***, disinfected with povidone iodine**** 5% and reduced to the pelvic cavity. Postoperative systemic antibiotes for 5 days and prophylactic dose of antitetanic serum were administered. The mother animal and her fetus were in a good healthy condition after the operation (Fig. 1d).



Fig. 1:

- A) The prolapsed uterus with presence of a star like healing area.
- B) Incision of the uterine wall.
- C) Pulling of the fetus.
- D) The mother and her fetus after the operation.

DISCUSSION

False or secondary uterine pregnancy is seen occasionally in all domestic animals and very rare in the mare (Roberts, 1971). Wheat and Meager (1972), recorded rectal findings similar to our findings in 2 cases of uterine rupture but the fetus was dead in both cases.

Makinnon and Voss (1993), cited that when the uterus ruptures before term, the mare may not show pain and entire episode may pass unnoticed by the owner. They added that once the uterus has ruptured and its contents have escaped, the uterus begins to involute almost immediately. In most cases, it is imposible to reach the site of rupture especially when the uterus has begun to contract and the wound margins are in apposition. These findings were in agreement with our findings.

On the other hand, Roberts (1971), reported tha almost all secondary extrauterine fetuses are dead by the time, the condition is diagnosed. In conclusion, ectopic pregnancy is greatly suggestive of uterine rupture in the mare and immediate interference must be adopted to save the life of the mother animal.

REFERENCES

Fischer, A.T.; and T.N. Phillips (1986): Surgical repair of a ruptured uterus in 5 mares. Equine Vet. J., 18:153.

Mckinnon, A.O.; and J.L. Voss (1993): Equine reproduction. Lea & Febiger, Philadelphia, London.

Pearson, H.; and H.R. denny (1985): Cited by V. Sloss and J.H. Dufty (1990): In handbook of Bovine obstetrics. Williams and wilkins, Baltimore, London.

Roberts, S.J. (1971): Veterinary obstetrics and Genital diseases. 2nd Ed., C.B.S. India.

Wheat, J.D. and D.M. Meager (1972): Uterine torsion and rupture in mares. J. Am. Vet. Med. Assoc., 160: 881.

^{***} ETHICON LTD-U.K.

^{••••} MUNDIPHARMA-SWITZERLAND.