



A RARE CASE OF SPONTANEOUS UTERINE RUPTURE AND PERITONITIS IN A SOW

Susitha Rajkumar* & E. B. Chakurkar

ICAR-Central Coastal Agricultural Research Institute, Ella, Old Goa, Goa-403402

*Corresponding author email: susithavet@yahoo.co.in

ABSTRACT

A rare case of spontaneous uterine rupture and subsequent peritonitis is discussed. A sow was treated for post partum endometritis and the animal was found dead two weeks after the onset. Post mortem examination revealed rupture of the uterus and peritonitis. The lesions showed that the animal died due to septic shock from peritonitis.

KEYWORDS: Sow, Post partum endometritis, Uterine rupture, peritonitis.

INTRODUCTION

Spontaneous uterine rupture mainly occurs due to extreme myometrial contractions during parturition and due to other factors like dystocia, failure of cervical dilatation and uterine torsion. Obstruction of the birth canal, simultaneous presentation of two fetuses and oversized fetuses are some of the predisposing factors for dystocia in swine (Schuh and Kurth, 2005). Spontaneous cases of uterine rupture had been reported in cattle (Pearson and Denny, 1975, Azawi and Naoman, 2012). This is an unusual report of rupture of uterine horn and septic peritonitis in a sow.

History and case description

An adult female Large White Yorkshire sow was observed having pus discharge from vagina and topical wound on the vulva at 2 weeks after farrowing. The farrowing was normal and no assistance or medication was given to the animal at the time of parturition. The condition was diagnosed as post partum endometritis and treated with parenteral antibiotic (Dicrysticin 2.5g) anti

inflammatory (Vetalgin 10ml) daily for 5 days and orally with ayurvedic preparation Himrop (Himalaya Herbal Health care) 100ml daily. The external wound was cleaned and applied with topical antimicrobial Topicure. The wound has healed and vaginal discharge has stopped and treatment was discontinued.

The animal was found dead two weeks after the onset of endometritis. Post mortem examination was carried out. The abdominal cavity was found filled with serosanguineous fluid containing fibrin clots. Moderate deposition of fibrin was observed over serosal surface of abdominal organs (Fig.1). The large and small intestine showed severe congestion and had gas accumulation and contents were scanty. Mesentry also showed congestion. The uterus showed severe congestion and there was a two inch sized rupture in the wall of the right horn of uterus (Fig.2). A large area of uterine tissue around the rupture showed dark discoloration due to necrosis. There was severe deposition of fibrin over the serosal surface of uterus around the site of rupture. The condition was identified as a case of septic peritonitis.



FIGURE 1. Uterus and intestine organs showing severe congestion and deposition of necrotic debris on uterus at site of rupture



FIGURE 2. Uterus showing rupture in the right horn. Entire uterus is congested and tissue around rupture shows dark discoloration due to necrosis and deposition of fibrin clots on the serosa

DISCUSSION

Vulval discharges are common after farrowing. But presence of thick foul smelling discharge after farrowing indicates infection and commonly due to retained dead fetus or placenta. In an investigation to study the cause of mortality in swine population, Chagnon *et al.* (1991) reported endometritis as a cause of death in 6.6% of post mortem examined cases. Christensen *et al.* (1995) recorded 20.9% of the mortality in sow population due to problems related to farrowing and late pregnancy. DeWinter *et. al.* (1995) investigated the etiology of enometritis in swine and could isolate a wide range of organisms including *E. coli*, *Staphylococcus* spp. and *Streptococcus* spp., *Actinobacillus pyogenes*, *Enterococcus* spp. and *Pasteurella multocida* from uteri of sows with endometritis.

Peritonitis is the inflammation of the serous membrane of peritoneal cavity. Septic peritonitis can occur as a result of exposure of the peritoneal cavity to infectious agents as a result of perforation and leakage of contents from visceral organs. Peritonitis commonly occurs as a result of the compromise to the gut wall and rarely due to traumatic perforation of uterus (Philscott, 2013). Toxins produced as a result of bacterial infection and tissue break down can get absorbed through peritoneum and can cause serious systemic effects leading to hypotension and shock. In the present case as the animal has started showing clinical signs of endometritis two weeks after farrowing, the rupture of the uterus might have occurred during farrowing. Development of endometritis followed by entry of infectious agents from uterus into the peritoneal cavity might have initiated septic peritonitis which has resulted in the death of the animal due to septic shock.

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