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Case report

Management of secondary uterine inertia in crossbred sow by caesarean section

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Abstract

A sow was presented with history of prolonged farrowing. Clinical examination revealed the case as secondary uterine inertia. Sow was showing signs of stress, and severe swelling of birth canal was observed. After proper fluid therapy and stabilization of sow, caesarean section was performed over left upper flank region and two dead piglets were removed. Although the surgery was performed after 36 h of onset of farrowing, yet the sow recovered well. It was concluded that with properly performed caesarean section the survivability of sow is good.

Keywords: Caesarean, piglets, sow, uterine inertia.

Introduction

Among the various livestock farming systems in India, pig farming is getting popular due to increasing demand of pork and pork products [1]. But there is lack of effective veterinary services and farm managers are not well trained to report the problems of this growing enterprise [2]. Several risk factors have been associated with farrowing which may decrease the litter size and hence, the profitability; like primary uterine inertia, secondary uterine inertia, still births, feto-maternal pelvic disproportion etc. [3]. The most common causes of dystocia reported in swine are uterine inertia and feto-maternal disproportion [4]. Secondary uterine inertia prolongs the farrowing time and increases the risk of prenatal mortality of piglets [5]. Caesarean section in sow is a rare operation to relieve dystocia [6,7]. In the present report we describe the management of dystocia in a sow due to secondary uterine inertia that was successfully managed by caesarean section.

Case History and clinical examination

A cross bred sow (weight 80 kg, age 22 months) was presented to Teaching Veterinary Clinical Complex, Haryana Pashu Vigyan Kendra, Karnal with the history of farrowing of eight piglets a day before. There was history of vaginal manipulation by farm manager to relieve dystocia. Sow was grunting and had severe vulvar oedema. The rectal temperature, pulse rate and respiration rate were recorded as 101°F, 52 beats per minute and 13 breaths per minute, respectively. Per vaginum examination revealed severe swelling of birth canal with only snout of the piglet could be touched without any vital signs. As the sow was in distress and birth canal was narrow due to swelling there were little chances of vaginal delivery. So, it was decided perform immediate caesarean section.

Treatment and discussion

Sow was administered Inj. ceftiofur sodium @ 5 mg/kg I/M, flunixin meglumine @ 2mg/kg IM, Inj. belamyl 4 ml IM, Inj. 5% dextrose 200 ml IV, Inj. N.S. 500 ml IV preoperatively.

Sow was restrained in right lateral recumbency and pre-medicated with atropine sulphate @.04mg/kg and xylazine @ 1mg/kg intra muscularly. Surgical site (upper flank area) was prepared aseptically. General anaesthesia was induced with 4% isoflurane [8] and maintained by 2% isoflurane under IPPV during surgical procedure. A vertical incision of 10 cm was made in upper flank. The skin, muscles and peritoneum were incised. Gravid uterine horns were exteriorised and packed properly to avoid abdominal contamination (Fig. 1). Two dead piglets were removed by squeezing and traction (Fig. 2) and uterus was explored up to ovarian poles for other piglets. The uterus was flushed with antiseptic solution (1% Betadine) and incision was closed by double row lambert suture pattern by Vicryl No. 2. Uterine horns were placed back in abdomen cavity. Peritoneum and muscles were sutured separately with Vicryl No. 2 in lockstitch pattern. Skin was opposed by horizontal mattress using nylon. Antibiotic therapy and meloxicam were administered for five days. Sow recovered well after 7-10 days of surgery.

Caesarean in sow is not performed routinely [6]. The decision for caesarean must be based on the clinical condition of sow, duration of onset of farrowing, number of piglets left in utero, type of dystocia [9]. In the present study we opted to perform caesarean section based on the animal's condition. Combination of injectable and inhalation anaesthesia is an accepted anaesthetic protocol in accordance with Cowart [4]. Vaginal trauma and swelling increase the risk of dystocia in agreement with a previous study [3]. Recovery rate of caesarean section in sow was reported to be 90% if performed within 24 hours of onset of labor [10]. In present report sow survived even when the caesarean was performed 36 h after dystocia onset and a previous report also noted similar findings [7]. It was concluded that with properly performed caesarean section the survivability of sow is good

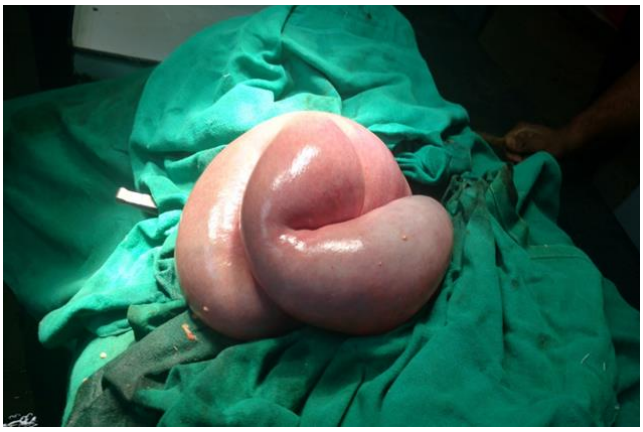

Fig. 1. Showing gravid uterine horns exteriorised during caesarean section in a sow

Fig. 2. Showing two dead piglets removed by squeezing during caesarean section in a sow.

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