

Case Report

Laparohysterotomy for Managing Dystocia due to Uterine Inertia in a Sow: A Case Report

Chandra Shekher Saraswat^{1*}, Yogendra Pal Singh², Shri Ram², Nupur², Hitesh¹, Garima Bhakar³ and Akanksha Detha³

¹Department of Veterinary Gynaecology & Obstetrics, PGIVER, Jaipur, Rajasthan, India

²Department of Veterinary Surgery and Radiology, PGIVER, Jaipur, Rajasthan, India

³4th year B.V.Sc. & AH, PGIVER, Jaipur, Rajasthan, India

*Corresponding author: drsaraswat83@gmail.com

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ABSTRACT

A nondescript sow with the history of delivering eight piglets and one remain in uterus since three days but unable to deliver was reported. The case was diagnosed as dystocia due to uterine inertia and laparohysterotomy was performed under general anesthesia, one male dead piglet was recovered successfully. The animal showed uneventful recovery.

Keywords: Sow, Uterine Inertia, Laparohysterotomy

Dystocia is considered rare in swine, with an estimated prevalence of less than 1% (Coward *et al.* 2007). Normal labor in swine usually lasts between 1 and 5 hours, with 15 minutes between delivery of each piglet; a period of greater than 1 hour between piglets is considered indicative of dystocia (Coward *et al.* 2007). The two most commonly reported causes of dystocia in swine include uterine inertia, or ineffective myometrial contractions, and fetomaternal mismatch. Present case report deal about successful surgical management of dystocia due to uterine inertia employing emergency laparohysterotomy in a sow.

CASE HISTORY

One adult 1.5 year old non-descript pluriparous sow weighing approx. 120 kg in her second farrowing were presented to Gynecological section of Veterinary Clinical Complex at PGIVER, Jaipur with the history of dystocia where previous attempts by owner and other clinicians were failed to deliver the one fetus by using oxytocin and calcium therapy.

Four days back, sow had delivered eight live piglets at owner doorstep successfully by owner's own intervention and one fetus was failed to deliver. On clinical examination, 106°F rectal temperature and birth canal was non-approachable with great pain and furiousness showed by animal itself. The presence of one full developed fetus skeleton was confirmed after radiological examination with in body of uterus. Earlier therapy with Injection oxytocin didn't gave its results and very limited space in birth canal for obstetrical procedures, therefore laparohysterotomy was decided for recovering of one remained fetus.

OPERATIVE TECHNIQUE

The sow was injected with xylazine-ketamine (2.2 and 15 mg/kg B.wt. IM respectively) with initial

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dose of 05 ml and 05 ml for xylazine and ketamine separately along with diazepam (04 ml) for sedation and prepared for aseptic surgery in lower flank region in combination with Diazepam. Additional line block infiltration was done with 2 percent lignocaine hcl (10 ml). A 10 cm long laparotomy incision was made dorsal and parallel to the base of mammary glands in lower flank region, fat layer and muscles were separated. A blunt opening was made in peritoneum and peritoneal incision was extended in length for exteriorising the uterus. The gravid horn was exteriorized gently for incision outside peritoneal cavity in order to minimise peritoneal contamination. The uterus was incised near the body and the piglet with loose foetal membranes was carefully removed by squeezing and traction. One antibiotic boluses (oxytetracyclinehcl 500 mg) were kept inside the uterus and the uterus was sutured with double layer of Lambert suture using No 1 chromic catgut. The operative site was closed routinely by separately suturing peritoneum, muscles and skin. Total 12.5 ml of Xyalzine and 6.5 ml of Ketamine was utilized for anaesthesia during the operation as the intermittent doses were preferred depending on the cooperation of the animal. Fluid therapy (ringer's lactate 01litre and NS 01 litre IV) and antibiotic (Inj. Ampicillin 3gm IM every 12hr) and anti inflammatory (Inj. Meloxicam 10ml IM) coverage was given. The sows recovered without any complication.

DISCUSSION

In this case report, sow had secondary uterine inertia, emphysematous fetus was lodged in body of uterus, injury and swelling inflicted on soft

tissues of birth canal resulted into narrowing of passage that hindered per vaginal delivery therefore immediate required emergency laparohysterotomy (Ghosh, 2007). The general anesthesia is essential for caesarean in pig due to its temperament although local anesthesia may also be successfully employed provided that animal is adequately restrained under sedation (Arthur *et al.* 1996). Similarly, in present cases xylazine-ketamine combination and line block by lignocaine infiltration produced sufficient depth and duration of anaesthesia with good muscle relaxation. It was concluded that under xylazine-ketamine anaesthesia with diazepam premedication, laparohysterotomy satisfactorily be performed in sow.

CONCLUSION

In conclusion, laparohysterotomy performed on swine under general anesthesia was associated with a good prognosis for survival of sow. The anesthetic procedures were efficient and guaranteed good sedation and analgesia of sow depending on its temperament.

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