

## **DYSTOCIA DUE TO CEPHALO-PELVIC DISPROPORTION IN A SOW**

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**Abstract:** A 3 years old sow presented with the history of fetal dystocia after being delivered of five live piglets. Obstetrical examination revealed that the dystocia was due to cephalo-pelvic disproportion in a posteriorly presented fetus. The dead male fetus was delivered by obstetrical procedure and completion of farrowing confirmed by clinical sign (urination) and ultrasonography of uterine horns.

**Keywords:** Urination, Pig, Dystocia, Cephalo-pelvic disproportion, Posterior presentation

### **INTRODUCTION**

Pig rearing is an integral part of income source for many households in the area of Salem, Kallakurichi and Cuddalore districts. Compared to other domestic animals the incidence of dystocia in sow is less and primary uterine inertia is the more common cause of dystocia (Roberts, 2004). Furthermore, it is difficult to identify the completion of farrowing at field level due to time interval for delivery of all the fetuses and difficult to assess by abdominal palpation as compared to canine. The present report documented a dystocia in posterior presentation caused by cephalo-pelvic disproportion of individual fetus in a sow and completion of farrowing diagnosed based on voiding of urine and ultrasonographic examination of uterine horns.

### **CLINICAL HISTORY AND OBSERVATION**

A 3 years old Large White Yorkshire sow in her second parity delivered five healthy piglets in the morning and showed persistence straining. Fifteen minutes following straining one fetus was noticed at vulval lips in posterior presentation with hanging hind limbs. On general clinical examination, animal appeared active and alert and exhibited continuous straining. Pervaginal examination revealed that fetus presented in posterior longitudinal presentation, dorso-sacral position and both the hindlimb extended outside of the vulval lips. Detailed obstetrical examination confirmed that fetal head was entangled in the pelvic outlet.

Hence, the case was diagnosed as dystocia due to cephalo-pelvic disproportion of individual fetus.

### TREATMENT AND DISCUSSION

The birth passage was lubricated with 60 ml liquid paraffin. The left hand was introduced in the birth canal by force and the entangled fetus head was held in hand. Simultaneously force was applied with right hand with judicious traction and delivered a dead male fetus. After the delivery of fetus placenta was removed from the birth canal. The sow voided copious urine after delivery of fetal membranes. Vaginal examination showed absence of fetuses inside the uterus. On Ultrasonographic examination the uterine horns were empty other than anechoic fluid in the horns, and reduced size of the bladder which indicated the completion of farrowing. Post-obstetrically animal was administered with Inj: Oxytocin (10 IU), Inj: Meloxicam (0.2 mg/kg), Inj: Chlorpheniramine maleate (0.2 mg/kg), Inj: Enrofloxacin (4 mg/kg) intramuscularly. Animal recovered uneventfully without further complications.

Incidence of dystocia is rarely encountered in sows (Cowart, 2007). Primary uterine inertia is the most common form of dystocia in polytocous species like canine and swine, but in the present case sow delivered five live piglets and one dead fetus which was noticed in the posterior presentation with dystocia led to secondary uterine inertia. Even though posterior presentation was normal in the swine, oversized head, fetal ascites, fetal emphysema might led to dystocia and 3-6 per cent were born dead (Jackson, 2004). Cephalo-pelvic disproportion of individual fetus was responsible for dystocia in the reported case. Copious amount of voiding of urine is the most common sign of completion of farrowing in sow (Jackson, 2004). Accordingly in the reported case sow voided copious urine after removal of posteriorly presented fetus. Furthermore, trans-abdominal ultrasonography revealed reduced size of the bladder and absence of fetus inside the uterus which have indicated the completion of farrowing. The present case report provides the technique of delivery of posteriorly presented feus in sow and information on assessment of completion of farrowing in sow.



| <b>During admission-<br/>Posteriorly presented<br/>fetus</b>                      | <b>Dead male fetus delivered</b>                                                  | <b>Diffuse type of placenta<br/>removed after delivery of<br/>fetus</b>             |
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| <b>Urination after delivery</b>                                                   | <b>Absence of fetus in both<br/>horns</b>                                         | <b>Reduced size of urinary<br/>bladder</b>                                          |

### References

- [1] Cowart, R.P. (2007). Current therapy in large animal theriogenology. 2nd edn., Chapter 103, Parturition and Dystocia in Swine, pp 778-784.
- [2] Jackson, P.G.G. (2004) Handbook of Veterinary Obstetrics, 2nd Edition Publishers, New Delhi.
- [3] Roberts, S.J. (2002). (ed.) Veterinary Obstetrics and Genital Diseases. Indian edition CBS.