

MANAGEMENT OF DYSTOCIA IN A MARE THROUGH FETOTOMY

CHANDRA SHEKHAR SARSWAT*, SUMIT PRAKASH YADAV, KRISHNA NAND BANSAL, ABHAY KUMAR MEENA, NEHA TRIVEDI, WANJARI PARAS, CHANDNI MEENA and ANITA

Department of Veterinary Gynaecology & Obstetrics, Post Graduate Institute of Veterinary Education and Research, RAJUVAS, Jobner, Jaipur-302031, Rajasthan, INDIA

Received: 17.04.2025; Accepted: 04.06.2025

SUMMARY

Delivery of dead male fetus in a pluriparous mare suffering from dystocia due to left lateral head and neck flexion with carpal flexion using partial fetotomy procedure is reported.

Keywords: Dystocia, Partial fetotomy, Pluriparous mare

How to cite: Sarswat, C.S., Yadav, S.P., Bansal, K.N., Meena, A.K., Trivedi, N., Paras, W., Meena, C. and Anita (2026). Management of dystocia in a mare through fetotomy. *Haryana Veterinarian*. 65(1): 129-130.

Dystocia in mares is perhaps one of the most challenging conditions faced by equine practitioners (Purohit, 2011). Fetotomy operations are performed on the dead fetus for the purpose of reducing its size by either division or removal of certain parts of the dead fetus (Kebede *et al.*, 2017). According to Frazer (2001) only 4 percent is the incidence of dystocia in Thoroughbred mares. The effective management during dystocia will be the deciding factor for the survival of the mare and foal with subsequent fertility of the mare (Pynn, 2014). Different types of obstetrical manoeuvres are used to resolve dystocia in various farm animals and in mares (Frazer, 2001). As per Vandeplasseche (1987), partial fetotomy is effectively utilized in 80 percent of dystocia cases. The present case report describes a rare case of fetal malposture with left lateral head and neck flexion with carpal flexion in a pluriparous mare resulting in dystocia, which was successfully resolved by using partial fetotomy (subcutaneous and percutaneous), repulsion and traction techniques.

An eight year old Marwari mare at her full term pregnancy of fourth parity was presented to the Gynaecology section of Veterinary Clinical Complex (VCC), Post Graduate Institute of Veterinary Education and Research (PGIVER), Jaipur with the history of intense and continuous straining with failing of foal delivery since last evening. The first sac (allantochorionic sac) was ruptured 12 hours before but there was no progression in foal delivery. General examination revealed alert and active animal with 102° F of body temperature, 64-68 of heartbeat and 24-26 per min of respiratory rate. The birth canal was moist enough with sufficient dilation of the cervix.

On the basis of clinical examination, the case was

diagnosed as dystocia in the mare due to left lateral head and neck flexion with carpal flexion of the dead foal. The malposture was handled by obstetrician failing which the partial fetotomy was decided to be carried out. Prior to manipulation, sedation of the animal was achieved in order to reduce the straining and restrained the animal by administering 8 ml of Xylazine intravenously along with epidural anaesthesia with 2 percent lignocaine hydrochloride 05 ml. The mare was stabilized by fluid therapy Dextrose 5 percent 07 liter and Ringer lactate 07 liter with supportive therapy of antibiotics Inj Intacef 4.5 gm I/V and analgesics Inj Melonex® 25 ml I/M with Inj. Anistamin® 15 ml I/M and Tetanus Toxoid 5 ml I/M. The perineal region was thoroughly washed and cleaned with antiseptic solution before the obstetrical operation. With the help of paraffin lubricant, the malposture was manipulated and traction was applied on the flexed carpals to extend. By this manipulation technique, both forelimbs were extended out from the birth canal. Afterwards, the manipulation was carried out on the deviated head and neck region but due to the extended both forelimbs limits the manipulation procedure through the birth canal. Partial fetotomy was carried out on the extended forelimbs by the subcutaneous method in which snares were applied on the forelimbs below the fetlock joint at the pastern joint. The skin was dissected with a scalpel blade and the muscles with fascia were separated with the help of fingers in order to expose the underneath carpal bones. Disarticulation of the metacarpal bones from the fetlock joint and elbow joint was accomplished without severing the skin. By applying traction on the metacarpal bones, the decorticated limbs were detached and removed (Fig. 1). The same procedure was repeated for the other fore limb. Afterwards, tried to reach the deviated head and neck, but again the birth canal

*Corresponding author: drsaraswat83@gmail.com



Fig. 1. Partial fetotomy operations in mare

space was still insufficient. So, it was decided to perform percutaneous fetotomy on the left side forelimbs. By using thygesons fetotome set, the left side forelimb was dissected at scapular region without damaging the birth canal. Afterwards, sufficient space was created with in the birth canal but failed to extend the deviated neck and head. Percutaneous fetotomy was carried out on the neck region by using the Thygeson's fetotome and decapitation was done. Later on, sufficient traction on the right forelimb and on the neck region by the help of snares and Krey-schotler hook, respectively leading to the successful expulsion of dead male foal along with placenta (Fig. 2). Mare recovered uneventfully on the next day.

Dystocia in mares is very challenging, especially in the case of a dead fetus and should be handled by an expert obstetrician, otherwise it is potentially dangerous (Higgins and wright,1999). Duration of vaginal intervention should be kept to a minimum even if the fetus is dead. Similar case was also reported by Sutaria *et al.* (2014), Singh *et al.* (2017), Hasssan *et al.* (2020). Bawane *et al.* (2022) and Dutt *et al.* (2024) performed partial fetotomy in mare to relieve the dystocia due to fetal abnormal presentation, position and posture.



Fig. 2. Dead foal delivered after partial fetotomy

REFERENCES

- Bawane, M., Ingawale, M., Raulkar, R., Kathe, A., Deshmukh, S. and Pawshe, C. (2022). Management of fetal dystocia by partial fetotomy in mare. *Indian J. Anim. Reprod.* **43**(2): 77-79.
- Dutt, R., Singh, G., Kumar, N., Anil and Dalal, J. (2024). Dystocia due to fetal maldisposition in a mare. *Vet. Pract.* **25**(2): 187-188.
- Frazer, G.S. (2001). Fetotomy technique in the mare. *Equine Vet. Edu.* **13**(3): 151-159.
- Hassan M., Shahid S., Asif A.R., Naveed, M.I., Shahzad, A.H. and Khan, M.A. (2020). Partial fetotomy: technique to resolve wry neck dystocia in mare. *J. Anim. Biotech. Anim. Reprod. Biotechnol.* **35**(4): 366-369.
- Higgins, A.J. and Wright, I.M. (1999). The equine manual. Saunders, London, p. 1143.
- Kebede, A., Mohammed, A. Tadesse, W. and Abera, D. (2017). Review on economic impacts of dystocia in dairy farm and its management and prevention methods. *Nature Sci.* **15**(3): 32-42.
- Purohit, G.N. (2011). Intra-partum conditions and their management in mare. *J. Livestock Sci.* **2**: 20-37.
- Pynn, O. (2014). Managing mare dystocia in the field. *In Pract.* **36**(7): 347-354.
- Singh, G., Dutt, R., Saharan, S., Dalal, J. and Chandolia, R.K. (2017). Dystocia due to dog sitting posture with lateral deviation of head in a mare. *Theriogenol. Insight.* **7**(1): 1-4.
- Sutaria, T.V., Nakhashi, H.C., Kapadiya, P.S., Suthar, B.N. and Chauhan, P.M. (2014). Management of dog sitting posture through fetotomy in mare. *Intas Polivet.* **15**(2): 365-366.
- Vandeplasseche, M.M. (1987). The pathogenesis of dystocia and fetal malformation in the horse. *J. Reprod. Fertil. Supp.* **35**: 547-552.