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Case Report

Bilateral segmental aplasia of oviduct with secondary hydrosalpinx in a buffalo

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ABSTRACT

The present paper reports an interesting case of bilateral segmental aplasia of oviduct along with hydrosalphinx and extensive ovarian adhesion in a buffalo.

Key words: Buffalo, oviduct, hydrosalpinx, segmental aplasia

Fertility problems are the most important causes of culling buffaloes. Examination of non-pregnant reproductive tracts at abattoir revealed that the percentage of normal buffalo tracts (40-74%) was much lower than cattle (85-90%). In most abattoir and clinical studies, ovario-bursal adhesions are occasionally seen in buffaloes at an incidence of 0.8-2.0% (Hemeida, 1988). Earlier reports suggest that the incidence of hydrosalphinx varied between 0.05 and 4.0% (Ramamohana Rao, 1997). But, generally the reports indicated the occurrence of hydrosalphinx due to adhesion of oviductal fimbria. Hydrosalphinx may occur secondary to segmental aplasia of the paramesonephrie duct. Reports on multiple affections of oviduct in a single case are less. It has been reported that anomalies such as segmental aplasia of paramesonephric duct rarely involve the oviduct (Roberts, 1971).

A morbid genitalia collected from Corporation Slaughter House, Bareilly, Uttar Pradesh had bilateral ovarian adhesion and hydrosalpinx, hence, the genitalia was subjected to thorough observation.

Examination of genitalia revealed extensive adhesion between uterus, oviduct, ovary and bursa. The oviduct was distended with clear viscous fluid and it was found that both the oviducts had discontinuity at certain points indicating that certain portions were aplastic. The infundibulum end of the oviduct was not visible and adhered to ovary. There were tough membranous adhesion from the dorsal part of uterus to oviduct and ovaries. Segemental aplasia of oviduct in buffaloes has already been reported with its incidence ranging from 1.3 to 5.2 % (Vale *et al,* 1988) in buffaloes of Latin America and 0.31 to 0.62 % in Indian buffaloes (Kumaresan and Ansari, 2002). Oviductal abnormalities account for 1.7 to 5.9% of buffaloes in Egypt and 10.9% in Pakistan and a very high incidence of bursal and oviductal abnormalities (18.6%) was reported in Brazil

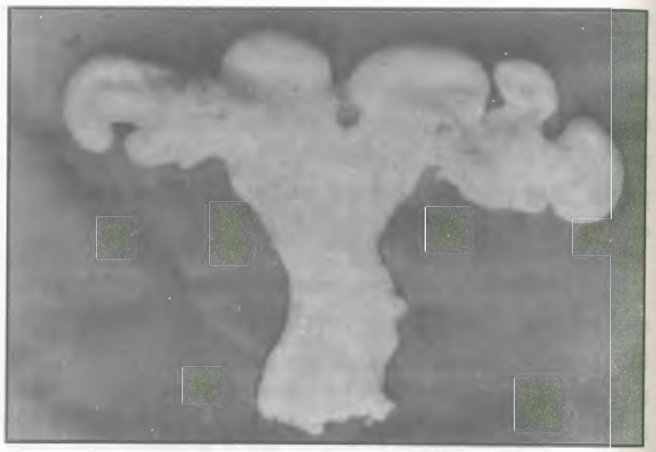

Fig. Bilatural segmental aplasia of oviduct with secondary hydrosal pinx in buffalo.

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(Hemeida, 1988). In India, abattoir surveys revealed hydrosalpinx in 1.8 - 2.2% of buffalo tracts (Dwivedi and Singh, 1971). Segmental aplasia of oviduct, hydrosalpinx and adhesion of bursa are the hindrances to proper gamete transport. If the condition is unilateral, the fertility of the affected animal is maintained to some extent. If it is bilateral, as in this case, complete sterility occurs, this might be the reason for slaughter of the buffalo reported in this case.

REFERENCES

Dwivedi, J.N. and Singh, C.M. (1971). Studies on pathology of reproductiye organs of Indian Buffaloes: Observations on bursitis and hydrosalpinx cases. Indian J. Anim. Sci., **41:** 27.

Hemeida, N. A. (1988). Reproductive problems in buffaloes in the world: In. World Buffalo Congress, ICAR, New Delhi. Vol II, Part I pp 197-205.

Kumaresa, A. and Ansari, M.R.(2002). Incidence of reproductive disorders in female buffaloes: An abattoir survey. Indian Vet. Med. J., **26**: 141 -143.

Ramamohana Rao (1997). Reproductive Disorders in Indian Livestock. Revised edn. ICAR, New Delhi.

Roberts, S.J.(1971). Veterinary Obstetrics and Genital Disease 2nd ed. CBS Publ. New Delhi, India pp 377-78.

Vale, W.G., Ohashi, O.M., Sousa, J.S. and Ribeiro, H.F.L. (1988). Clinical reproductive problems of buffaloes in Latin America. In World Buffalo Congress, ICAR, New Delhi. Vol II, Part I pp 197-205.