Dystocia Due to Monstrosity of Cranial Duplication in Buffalo

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Monstrosities are a common cause of bovine dystocia with the incidence of 0.51 per cent (Bahr and Distl, 2005). Occurrence of monozygotic conjoined twins is about one in one hundred thousand bovine births (Noakes, 2009). Present case places on record the monstrosity associated with cranial duplication in a buffalo calf.

Case History and Observations

A pleuriparous Murrah buffalo (Case no. 1-5166) in 4th parity at complete term of gestation was brought to the Teaching Veterinary Clinical Complex, LLRUVAS, Hisar for delivery. Buffalo was examined for obstetrical correction under posterior epidural anaesthesia (5ml, 2% Lignocaine Hydrochloride) to prevent tenesmus. Obstetrical examination revealed complete dilatation of cervix with palpable fore limbs of fetus in anterior presentation and dorso-sacral position. Further, exploration evidenced a pair of force limbs beneath the body of fetus along with two heads. Fetal movements and other reflexes were absent. Dystocia due to monstrosity was diagnosed and caesarean section was attempted to deliver the monster fetus.

Treatment and Discussion

Following all aseptic precautions caesarean section was performed in right lateral recumbency under local analgesia (2% Lignocaine hydrochloride) with an incision parallel and lateral to milk vein. A female monster was delivered and surgical wound was closed with three stage suture pattern.

The monster had two normal heads, two necks, two pairs of fore limbs, two thorax, joined caudal to last rib (abdominopagus). Following thorax, fetus had single vertebral column and a pair of hind limbs with two tails. The monster was diagnosed as “Dicephalus Tetrabrachius Abdominopagus Dipus Dicaudatus” as per the classification of Roberts (1986). In the vulva two openings were present communicating to uterus and bladder separately. Fetus had atresia ani. Postmortem examination of the fetus showed no duplication of the internal organs, one uterus and two ovaries.

Incomplete and/or complete conjoined twin monsters, though uncommon, have been observed earlier in cattle (Sakthivel and Mathew, 2000) and buffaloes (Shukla et al., 2007). Etiology of Dicephalus Tetrabrachius Abdominopagus Dipus Dicaudatus monster is obscure in literature. Symmetrical twins are usually monozygotic in origin and represent incomplete division of one embryo into two components usually at the primitive streak of developmental stage and in the event they may develop into abdominopagus (Noden and Delahunta, 1985). Fetotomy cannot be

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attempted in such monstrosities due to exhaustive and prolonged procedure and caesarean section is ideal in management of such dystocia (Whitlock et al., 2008)

Summary

A rare fetal monster classified as “Dicephalus Tetrabrachius Abdominopagus Dipus Dicaudatus” has been reported in a pleuriparous buffalo along with management of dystocia by caesarean section.

References


OBITUARY

It is with sorrow that IVJ announces the sad demise of Dr Ramesh Chandra Pathak on 11th February, 2013 at Noida. Dr Ramesh Chandra Pathak was born on 15.7.1929 at Mathura. He did his graduation (BVSc&AH) and post-graduation (MVSc) in Veterinary Microbiology from Agra University in 1951 and 1959, respectively. Dr Pathak completed his M. S. (Veterinary Medicine) in 1962 from Illinois University, USA and earned Ph.D. (Veterinary Microbiology) in 1967 from Agra University. Dr. R. C. Pathak served College of Veterinary Sciences, Mathura in various capacities for more than 38 years from 16-7-1951 to 31-7-1989. He remained Head of Department of Veterinary Microbiology for several years from 1970, and Dean of the college of Veterinary Sciences, Mathura from 1975 to 1982. He also served as Chief Executive Head/Pro-Vice-Chancellor of Mathura Campus of Chandra Shekhar Azad University of Agriculture and Technology, Kanpur from 1979-1982. He was Scientist Emeritus (ICAR) from 1989-1992. Dr Pathak got recognition as one of the top most microbiologist and pioneer mycoplasmologist of the country at various scientific forums. Dr. Pathak was President of Indian Association of Veterinary Microbiologists, Immunologists and specialists in infectious diseases (IAVMI) and Indian Association of Mycoplasmatologists (IAMS) for several years.

Besides, Dr. Pathak also worked as Project Coordinator, of the All India Coordinated Research Projects on FMD and Respiratory Diseases of Poultry of the ICAR. He had more than 150 research papers to his credit which had been published in journals of national and International repute. Dr. Pathak had reported for the first time in India the existence of PPLO in poultry, isolation of PI3 virus, Aspergillus fumigatus from cow metritis and Candida species from poultry.

After his retirement he was living in Jagannathpuri near Shri Krishan Janam Bhumi Mathura. Dr Pathak left for his heavenly abode on 11th February, 2013 at NOIDA, Delhi. He has left after him Mrs. Pathak, two daughters, two sons and grandchildren. He was one of the greatest vety microbiologists of India and president of IAVMI and Indian Association of Mycoplasma. We pray to the Almighty that his soul may rest in peace.