IJAR 18(1), 1997; 85

Thoracopagus parasiticus, Hermophrodite Monster in a Gir Cow.

P.S. DALAL, K.S. DATTA and K.S. MURTHY

Cattle breeding farm, Gujarat Agricultural University,
Junagodh - 362 001.

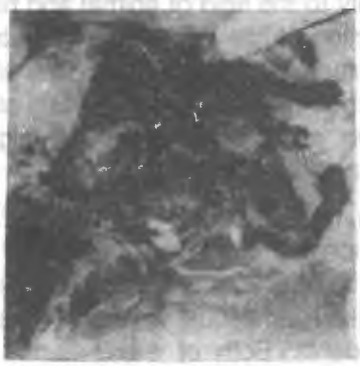
Incidence of monsters in cattle is one in 100,000 bovine births (Roberts, 1971). Of interest in this case report is the still birth of Thoracopagus Parasiticus hermophrodite monster with different external and internal anomalies.

A seven year old cow (Kaveri, B.No.8 / 88) of the farm in 5th parity was reported to be straining for the last four hours after the expulsion of first water bag. Rectal examination revealed ventral presentation in ventro-sacral position misleading to the presence of dead twins. The position was corrected per vaginally and the dystocia was relieved with traction and pulling the dead calf.

The following external and internal anomalies were observed in the thoracopagus parasiticus monster (Fig.): The thoracopagus parasiticus was developed in the hind portion only. This portion was composed of pelvic girdle and appendages with hip joint and fetlock joints but, devoid of tail, anus and urogenital openings. Thoracopagus parasiticus was attached to the last two thoracic vertebrae of the main calf, through extension of skin folds. The thoracopagus parasiticus had one polydactyl (three digits) in right hind limb and monodactyl in left hind limb. On the Ventral surface of this hind portion, four normal teat buds were noticed.

The main calf to which thoracopagus parasiticus was appended had a small immobile tail, measuring 6 cm. with all vertebrae fused together. There was no external opening of alimentary canal and urogenital system, clitoris, measuring 2 cm was found and a solid cord of male external genital ridge devoid of any lumen and opening was also seen. This makes the calf an intersex. Internal exploration revealed presence of under developed uterine horns and oviducts bearing millet seed shaped ovaries on each side. Cervix showed atresia and the kidneys were hyperplastic. The penile urethra was completely obliterated by hard solid mass. The rectum was without lumen and external opening.

Genetic miscoding, leading to disorder of tissue sorting and assembling might have taken at gastrula and neurula stage. The chromosomal aberrations and abnormal endocrine mechanisms also might have resulted in development of such monsters (Donald *et al.,* (1952). The monster in the present study was sired by a bull which in the past sired another monster. Hence the bull was discarded from the breeding programme of this farm.



REFERENCES

Donald, H.P., Dead. D.W. and Wilson, L.A. 1952. Genetic analysis of incidence of dropisal calves in herds of Aryeshire CAttle. British Vet. J. *108:* 227.

Roberts, S.J. (1971). Teratology. In : Ueterinamy Obstetrics and Gental Diseases 2nd Ed. C.B.S. Publishers and Distributors Delhi. *pp:* 49-80.