

A CASE OF BILATERAL FORE LIMB ADACTYLY IN A CAMEL CALF

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Congenital deformities are structural and functional defects arising due to defects in or damage to the developing foetus resulting from genetic abnormalities, the intrauterine environment, and errors of morphogenesis, infection or a chromosomal abnormality. The mildest malformations occur in the late stages of development and are result of dominant inheritance. They can affect an isolated portion of a body system, the complete system or parts of several systems (Macri *et al*, 2010). Developmental alterations of the digit and phalanges are manifested as numerical augmentation or deformities as well as structural variations in size, form and position. These may be partially absent known as ectrodactyly or hypodactyly, supernumerary -polydactyly, fused -syndactyly and completely absent - adactyly (Tiwari *et al*, 2009). The incidence of adactyly is a rare condition in animals and is not reported in camel previously.

A case of bilateral fore limb adactyly in a camel calf is reported here.

History

A premature camel calf was born after 11 months of gestation in January 2011 at NRCC dairy farm. The calf survived only for 4 minutes and weighed 27 kg. Both the hind limbs of calf were well developed but the both feet pad of fore limbs were absent. Dam had a history of suffering from respiratory problems like coughing and anorexia since last 15 days.

Result and Discussion

Clinical External examination revealed anomaly in both the fore limbs. There was absence of foot and limbs were developed only up to distal cannon region. The right foreleg was slightly shorter than left. (Fig. 1). The feet pads of hind limbs were normal.

Although little is known about the basic mechanism of congenital limb deformities; several etiological factors have been identified. Etiology

of similar anomalies include genetic defect, administration of chemotherapeutics, malnutrition (lack of riboflavin), transplacental viral infection and X-rays etc (Gilbert, 2000). Other causes of distal limb absence in new borns includes strangulation by restrictive bands, *in utero* accidents and post natal trauma. (Johnson *et al*, 1995).



Fig 1. Aprematurely born of camel calf showing adactyly of forelimbs.

However, the end etiology of this abnormality could not be ascertained.

References

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