Surgical Removal of a Supernumerary Foot in a New-born Calf: a Case Report

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Introduction

A duplicate foot is a rare, congenital, bovine anomaly. It differs from polydactyly in that supernumerary metacarpal and carpal bones are present, as well as extra digits. Only a few cases of this anomaly have been reported in the literature to date. Another term for this condition is bimelia. It is understood that bimelia refers to the presence of a second limb in an abnormal location. Several types of polimelia are described according to the location of accessory limb. Pigomelia describes accessory limbs attached to the rump. Pelvomelia describes extra limbs attached to the pelvis. Gastromelia describes extra limbs attached to the ventral abdomen. Toracomelia describes extra limbs attached to the thorax. Notomelia describes extra limbs attached to the dorsal midline, and cefalomelia describes extra limbs attached to the head.

Materials and Methods

A 30 day old female calf was referred to the teaching hospital of the veterinary college of Ferdowsi University. The calf had been born with a second foot

attached to the forelimb. No other anomaly of the body was detectable grossly. The calf was examined clinically and radiographically. The supernumerary foot was attached to the distal part of the shortened tibia. Surgery to remove the supernumerary foot was performed successfully.

Results

Subsequently, the calf grew normally is a normal cow in the herd.

Significance

The supernumerary foot, if left, could cause malfunction of the forelimb. Some researchers believe that BVD virus and/or a teratogenic substance might affect the embryo and cause this type of anomaly. Other researchers are concerned that there might be a hereditary pattern to these types of limb anomalies and therefore suggest no surgical correction or rebreeding that could lead to further dissemination of the possible genetic defect.