CASE REPORT
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LOBSTER CLAW SYNDROME (ECTRODACTYLY) IN A GERMAN SHEPHERD PUP

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ABSTRACT

A two-month-old German Shepherd pup was presented to Teaching Veterinary Clinical Complex, Mannuthy, Kerala with visible deformity of left forelimb. From the history narrated by the owner, the condition was congenital in occurrence. With the help of radiography, the condition was diagnosed as lobster claw syndrome. Due to the unwillingness of the owner for the surgical correction, we advised the palliative care.

Keywords: Canine, ectrodactyly, split-paw deformity, lobster claw syndrome

INTRODUCTION

Ectrodactyly, also known as lobster claw syndrome, oligodactyly, hypodactyly or split paw deformity is a rare inherited condition (Barrand, 2004). It is associated with dislocation of the elbow, contracted tendons, limb curvature and limb shortening. Severity and symptoms vary with the degree of abnormality. Affected dogs show lameness and some of them are unable to bear weight on the affected limb (Farrow, 2003). In the present case the animal was unable to bear weight on the affected limb. A case of ectrodactyly in a German Shepherd pup is placed on record.

CASE HISTORY AND OBSERVATIONS

A two-month-old male German Shepherd pup was presented to Teaching Veterinary Clinical Complex, Mannuthy, Kerala with an obvious deformity of left forepaw (Fig. 1). On clinical examination, physiological and biochemical parameters were within the normal range. The limb had all five digits but a large interdigital cleft was present and footpad also appeared abnormal. All other limbs were normal in appearance. Other puppies in the litter were normal and owner was unaware of the pedigree of sire and dam.

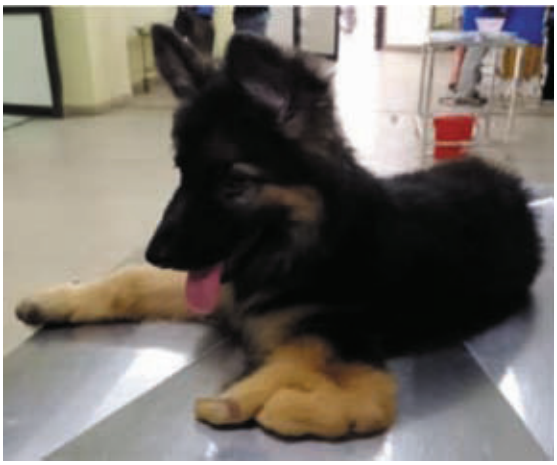

Fig. 1 Ectrodactyly in left thoracic limb

Fig. 2 Radiograph showing abnormal elbow and carpal joint

Medio-lateral radiographic view of left forelimb (Fig. 2) revealed splitting of the limb into two from the level of elbow with separation of radius and ulna along with the associated soft tissues, extending through the carpal joint. Ulna was short compared to radius. In the carpal joint, radial carpal bone was entirely separated from remaining ones.

TREATMENT AND DISCUSSION

Owner was not willing for reconstructive surgery. According to Barrand (2004), the term ectrodactyly is used to describe the bone and soft tissue separation in the distal region of the forelimb. The condition can be either unilateral or bilateral (Carrig *et al.*,1981). Thoracic limbs are most commonly affected. The hindlimb affections are very rare. Azizi *et al*. (2017), reported the hindlimb ectrodactyly in foals. In this case the condition was found to be unilateral and the bone and soft tissue separation was noticed from the elbow region. The common cause of this condition was reported to be the intrinsic malformation in the development of mesenchymal bone cells between 23rd and 25thdays of gestation. Other factors include genetic mutation, diet, drugs, vaccines and radiation (Towle and Breur, 2004). The treatment of this condition was based on the severity of clinical signs. The recommended treatment of choice for the severely affected animal was reported as limb amputation (Bingel and Riser, 1977). Ferreira *et al.* (2016) reported the successful surgical correction of unilateral forelimb ectrodactyly in dog with bone and soft tissue reconstruction combined with the diaphyseal ostectomy of the ulna.

CONCLUSION

Ectrodactyly or lobster claw syndrome is an uncommon and rare inherited condition in dogs. In the present paper, a case report of ectrodactyly in a two-month-old pup was reported. As the owner was not willing for corrective surgery, palliative care was advised.

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