

# SWIMMER PUPPY SYNDROME IN A NEOPOLITAN MASTIFF: A CASE REPORT

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Swimming puppy syndrome is one of the mysterious disease in dogs. The term 'swimmer' is used for describing a puppy that paddles his legs much like a turtle and is unable to stand. A puppy should be standing and walkin by three weeks of age. Because of weak muscles in the hind limbs, swimmers are generally unable to stand at the normal age. Synonyms for swimming puppy syndromes are swimmer syndrome, flat pup syndrome, splay leg (paraparesis), splay weak (tetraparesis), and myofibrillar hypoplasia and it is one of the musculoskeletal disorders in puppies (Harkness and McCormick, 1981). The persistent inability to ambulate effectively leads to flat thorax, skin lesions, milk regurgitation, cyanosis, dyspnea, and aspiration pneumonia (Dumon, 2005). In dogs, a predisposition for swimmer syndrome is higher in chondrodystrophic or brachycephalic breeds whereas, in cats, the syndrome has been reported in a Devon Rex and a crossbreed kitten (Fossum *et al.*, 1985;

Fossum *et al.*, 1989; Verhoeven *et al.*, 2006).

## Case History and observations

Twenty five day old, a Neopolitan Mastiff puppy, weighing about 3.5 kgs was presented to the Veterinary College, Shimogga with a history of unable to stand or move and always extended limbs with swimming like movement on sternal recumbency. The puppy's inability to adduct the limbs was observed significantly. Despite providing the standing position with manual support, the thorax was hindering for adduction of forelimbs. On clinical examination, it was also observed that puppy was unable to turn to sternal recumbency position after inverted manually to dorsal recumbency position, as seen in turtles. Neurological examination was normal. The radiographic examination of the chest, revealed increased lateral width as compared to the dorsoventral and all four legs were lying beside the body parallel to the floor (Fig. 1).



Fig. 1: Radiography lateral(a)and ventro dorsal(b) views showing decreased ventrodorsal lengths as compared to lateral width of the thorax

## Treatment and Discussion

The puppy's chest was supported by foam compressive bandage including its scapular region to decrease the lateral width of the thoracic cavity. It helped puppy to stand on the ground slowly. The same compressive bandage was followed for about 2 month alongwith massage of the limbs. It helped puppy to bring its forelimb in adduction position and bear weight on its fore and hind limbs. The weight bearing of puppy on its limbs was improved by making the puppy to walk with support and later on without support. The puppy completely recovered about its third month.

Lorenz (1977) and Verhoeven (loc. cit) stated that in swimmer dogs regurgitation, aspiration pneumonia, and dyspnea has been reported due to the increased thoracic and abdominal pressure. However, in the present clinical case none of these symptoms were seen. Hoskins (2001) opined that the condition is self-correcting as the muscles develop and strengthen. Vijayakumar *et al.*, (2012) successfully managed the condition in twenty days old Labrador dog with the help of cotton padding and bandage and the pup was able to ambulate like normal pup by twelfth day of the treatment.

In the present case there was a flattened thorax which was the cause of swimmer pup. Compressive bandaging along with massage of the limbs helped in forceful reduction of the lateral width of the thorax and puppy started to ambulate normally.

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