

TRAUMATIC PNEUMOTHORAX IN A LABRADOR PUPPY- A CASE REPORT

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ABSTRACT

A fifty day old Labrador puppy was presented to the University Veterinary Hospital, Kokkalai with dyspnea. Physical and radiographical examination revealed that animal was having pneumothorax. The case was successfully managed.

INTRODUCTION

Pneumothorax is the accumulation of air between the parietal and visceral pleurae and is one of the two most commonly recognized results of traumatic injury to thorax. Traumatic pneumothorax is classified as “closed” or “open”. Closed pneumothorax without skin wounds most often results from rapid compression of thorax (and lungs) against a closed glottis resulting in alveolar disruption. Closed traumatic pneumothorax is a rare condition that requires surgical intervention (Beal, 2010).

CASE HISTORY AND OBSERVATION

A fifty day old male Labrador puppy was presented to the University Veterinary Hospital, Kokkalai with a complaint of respiratory difficulty for last twelve hours

after jumping from a table. On examination, pup was dull and was having oral breathing in a dyssynchronous pattern. The animal had tachycardia, tachypnea and pale mucous membranes. Temperature was 102°F. Auscultation of thorax revealed muffled heart sounds and respiratory sounds. Electrocardiography (Fig. 1) revealed sinus tachycardia (250 bpm). Animal was subjected for radiography of thorax which revealed retraction of lung lobes from chest wall radiolucent area of free air in which no pulmonary vascular structures in the caudal thorax (Fig. 2 & 3), suggestive of pneumothorax.

RESULTS AND DISCUSSION

The puppy was given supplemental oxygen through face mask for three hours. The animal was treated with Cefotaxim 40mg/kg body weight, Dexamethazone 1mg/kg body weight and Deriphylline 10mg/kg body weight intravenously for five days. The animal showed improvement from second day onwards and became completely normal by fifth day. Radiography repeated after 14 and 25 days (Fig. 4 & 5) of treatment showed complete recovery of animal.



Fig. 1. Electrocardiogram of puppy showing sinus tachycardia
25 mm=1 sec, 1cm=1mv



Fig. 3. Dorsoventral thoracic radiograph of the same puppy showing over distention of thoracic cavity



Fig. 2. Right lateral thoracic radiograph of a 50 day old puppy with pneumothorax



Fig. 5. Right lateral thoracic radiograph of the puppy after 25days



Fig. 4. Right lateral thoracic radiograph of the puppy after 14 days

In the present case, the animal had a history of jumping down from a table. That might have resulted in mild lung injury and subsequent pneumothorax, as the respiratory distress was noticed after that incidence. According to Shaer (2010), pneumothorax

leads to increased air filled space in the pleural cavity and collapse of lung lobes. The main presenting signs are dyspnea and tachypnea. Radiography reveals gas in the pleural cavity which results in the retraction of lung lobes away from thoracic wall and increased opacity of lung lobes due to collapse. Conservative management may be sufficient, if the pneumothorax is small. In the present case also the animal recovered with medical management spontaneously without any surgical intervention.

REFERENCES

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