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CARDIO DEXTROPOSITION AND PECTUS EXCAVATUM IN DOG

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SUMMARY — *The authors present a case of dextroposition and pectus excavatum in a female Pekingese dog, approximately 30 days old.*

They document the case with radiographies, cineangiocardiology and a picture taken after the necropsy, associating them with the clinical symptoms.

UNITERMS — *Roentgen diagnostic*; Cardio dextroposition*; Dogs*.*

INTRODUCTION

As a consequence of traumatic processes, such as diaphragmatic hernia or tumoral compression, changes in the heart's position can occur in dogs¹. The relationship between congenital "pectus excavatum" (funnel chest) and cardioposition, as far as we know from the literature consulted, has not been related.

CASE REPORTS

A female Pekingese dog, approximately 30 days old, bearing symptoms of asphyxia

was clinically examined. The symptoms of asphyxia appeared just after birth and increased when the dog was fed. The animal was prostrated and tried to maintain a seated position. The mucosae were cyanotic and the rectal temperature was 38.2°C. The sternum was excavated and the ribs showed an abnormal curvature with consequent dorsoventral flattening of the thorax. The shock of the heart's and was felt at the right side, where it was also auscultated.

The fluoroscopic examination showed a deviation of the heart to the right side. This fact was documented by radiographies (fig. 1 and 2) which showed an accentuated dorsal convexity of the sternum beginning at 4th sternabra. The normality of both the cardiac compartments and the large vessels was noted through the cineangiocardiology by using triiodide (Hypaque Winthrop Products Inc.) contrast injection in the right jugular.

After a few days, the animal died and the necropsy showed the dextroposition of the heart, as well as compression of the right lung, consequence of the heart's modified position. These facts lead us to point out "pectus excavatum" as one of the causes of cardiac dextroposition in dogs.

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Fig. 1 — Right side. Dorsal convexity of the sternum, beginning at the 4th sternebra. "Pectus excavatum".



Fig. 2 — Ventro dorsal. Deviation of the heart to the right side. Cardio dextroposition.



Fig. 3 — Position of the organs during necropsy, showing the compression of the right lung by the heart.

DISCUSSION

In spite of the frequency of "pectus excavatum" in dogs, particularly in Pekingeses, we find that the dextroposition of the heart as a consequence of this anomaly has not been registered yet, probably because it occur in new born animals, that perhaps do not survive, as in the present case.

It would be interesting that in the cases of dogs with "pectus excavatum" (funnel chest), a radiography of the torax should be included, in order to verify the precise position of the heart.

This way, we believe that animals bearing this condition could suffer a surgical correction by means of a decompression of the pulmonar area.

fêmea, com aproximadamente 30 dias de idade, que se apresentava prostado, com sintomas de asfíxia, mucosa cianótica e temperatura retal de 39,2°C.

Os exames radiológicos e os dados de necropsia revelaram também a presença de pectus excavatum, causa, segundo os AA., do deslocamento cardíaco que, por sua vez, ocasionava compressão do pulmão direito, determinando o quadro clínico apresentado pelo animal.

Conforme pode ser apurado, pelo exame da literatura especializada, a relação entre a dextroposição cardíaca e o pectus excavatum não havia sido ainda assinalada.

UNITERMOS — *Radiodiagnóstico**; *Dextroposição cardíaca**; *Cães**.

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RESUMO — *Registrou-se caso de dextroposição cardíaca em 1 cão da raça pequines.*

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