PRIMARY LUNG NEOPLASIA IN OVINE. DESCRIPTION OF AN UNUSUAL CASE

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A 7 year-old ewe, Bordaleira Serra da Estrela breed, was submitted to the pathology service of the Superior Agrarian School of Viseu, after sudden death during a vaccination procedure, without previous clinical signs records. The animal presented a good body condition and mucopurulent nasal discharge. After the opening of the thoracic cavity, a whitish proliferative lobulated mass, with firm consistence, surrounding the heart, was seen. A massive hydrothorax was also present. Parietal pericardium was adherent to the stern. Several nodules were found close to the parietal pleura, and were also present at the medial aspect of the ribs. The medial surface of the lungs presented several whitish spots.

Given the singularity of the lesions, its location, the main objective of this work is describing this rare pulmonary and pericardic lesion, shedding concerns on new pathways for this oncogenic event and providing new approaches in ovine oncology diagnostics.

Samples from the lungs, mass surrounding the heart, liver, spleen and small bowel were processed for routine histopathological diagnosis and an immunohistochemical study was also performed.

Microscopic exam of the lung fragments revealed atelectasy, severe congestion, peribronchiolar cuffing and lung interstitium mononuclear inflammatory infiltrate, very rich in macrophages and lymphocytes. The spots corresponded to a bronchic epithelium hyperplasia, with intense desquamation.

Pleura hypertrophy, with epithelial metaplasia, cubic appearance, papillomatous type proliferations, fibrosis and neovascularisation was also seen.

Microscopically, the proliferative pericardic mass corresponded to small undifferentiated epithelial cells proliferations, in a tubular type pattern organization, with abundant fibrous tissue stroma. Nevertheless, some areas with well differentiated cylindrical epithelium, and, pseudostratified cylindrical type, apparently ciliated, in one of the lobules were also seen.

The authors suggest the hypothetic diagnosis of an extra pulmonary (pericardic) metastasis of a primary lung neoplasia.