Pulmonary lesions in adult dairy goats slaughtered in Cyprus

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Objective

The objective of the present study was the **evaluation of the pulmonary lesions** from adult dairy goats, slaughtered in the island of Cyprus, using a **modified score system**.

Materials and Methods

- The present survey conducted from **June to October 2025**.
- Two main **abattoirs of Cyprus** were included in the survey (Fig. 1).
- Random collection of **lung specimens** from adult dairy goats was performed.
- The evaluation of the pulmonary lesions was based on the **macroscopic image** (Fig. 2) of the lungs.
- The **score system** (Fig. 3) used for the evaluation of pulmonary lesions of slaughtered pigs was modified for use in adult dairy goats.
- Individual samples were taken for **microbiological** and histopathological examination.

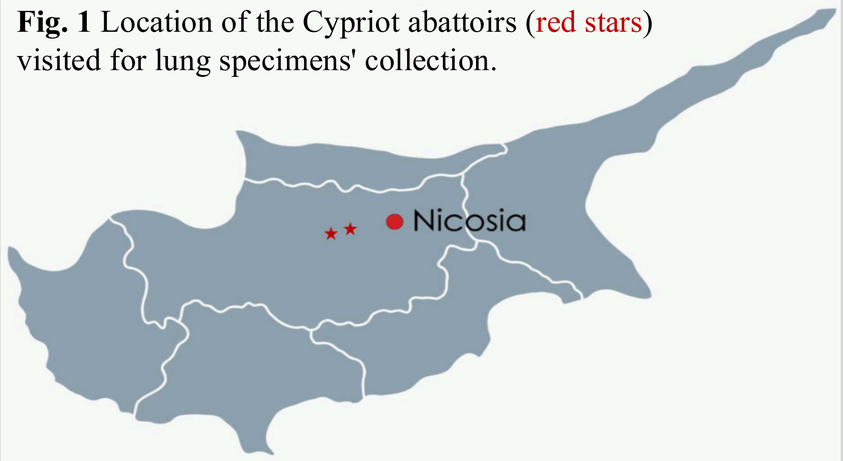

Fig. 1 Location of the Cypriot abattoirs (red stars) visited for lung specimens' collection.

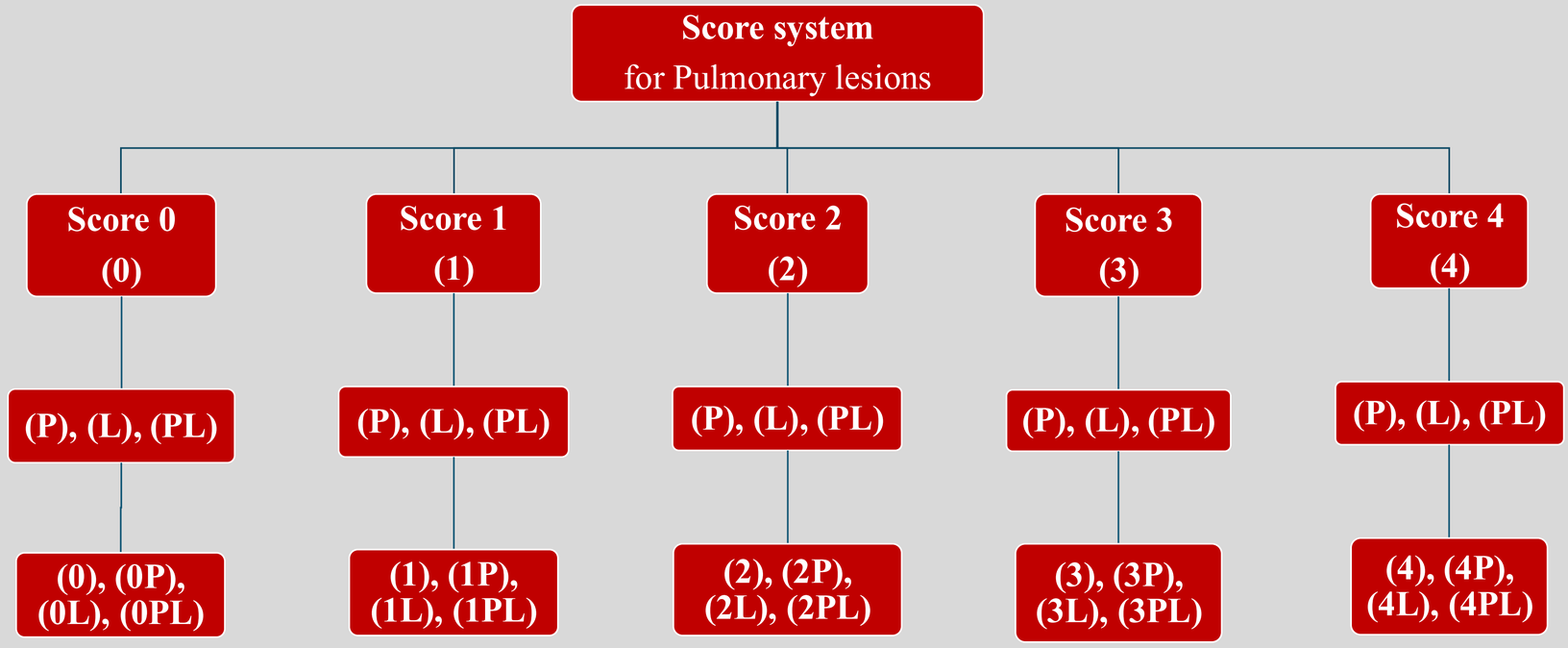

Fig. 3 Score 0: No lesions, Score 1: 1-25% affection of lungs, Score 2: 26-50% affection of lungs, Score 3: 51-75% affection of lungs, Score: >75% affection of lungs, (P): Pleuritis existence, (L): Lymph nodes involvement, (PL): Pleuritis existence and lymph nodes involvement.

Fig. 2 Macroscopic evaluation of one lung derived from one adult dairy goat.

Results

- In total, **51 lungs** of adult dairy goats were evaluated.
- The score distribution of the 51 evaluated lungs is presented in **Table 1**.
- 29 out of 51 (56.9 %) lungs evaluated had no pulmonary lesions (Score 0).
- 22 out of 51 **(43.1 %)** lungs evaluated **had pulmonary lesions** (Score ≥1).
- 3 out of 51 (5.9 %) lungs evaluated had pleuritis.
- 8 out 51 **(15.7 %)** lungs evaluated had lymph node involvement, consistent with **caseous lymphadenitis** (Fig. 4).
- Microbiological examination confirmed the presence of *Corynebacterium pseudotuberculosis*.

Score						
	0	**1**	**2**	**3**	**4**	**Total**
P	2	0	1	0	0	3
L	6	1	0	1	0	8
PL	0	0	0	0	0	0
Total	29	10	8	1	3	51

Table 1 Score distribution of the 51 evaluated lungs of adult dairy goats.

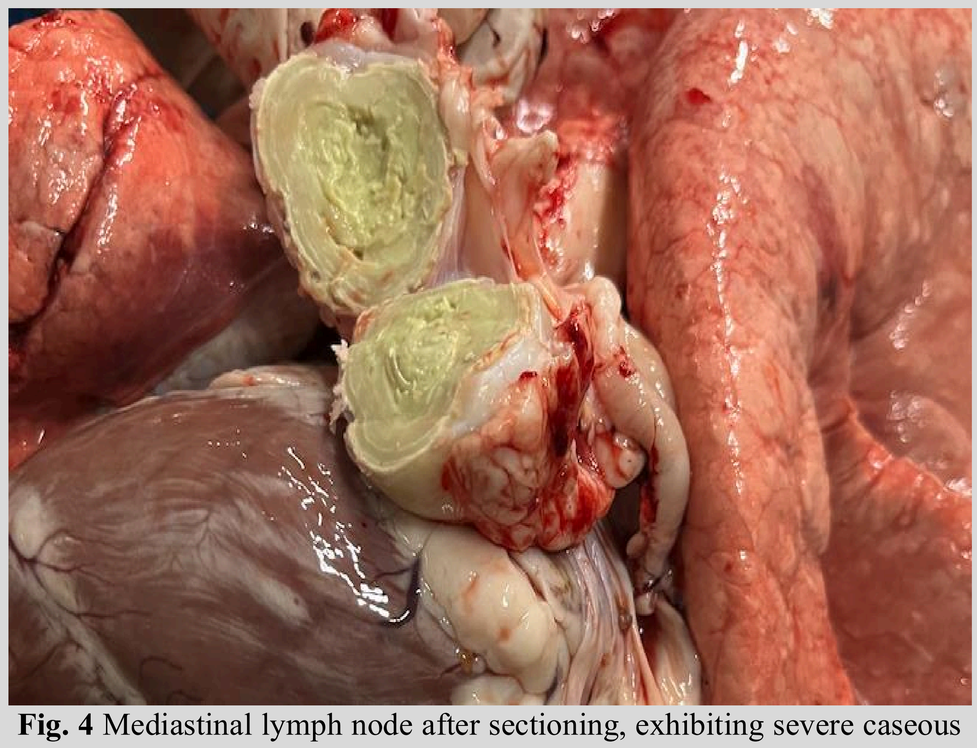

Fig. 4 Mediastinal lymph node after sectioning, exhibiting severe caseous necrosis with lamellation consistent with *Corynebacterium pseudotuberculosis* infection.

Conclusions

The presents study points out:

(a) The **high prevalence of pulmonary lesions** in randomly slaughtered adult dairy goats, indicating that both health and welfare are compromised, negatively affecting the economic prosperity of the Cypriot goats' farming.

(b) The pulmonary lesions caused by ***Corynebacterium pseudotuberculosis*** infection constitute a serious threat for the local dairy goat industry. Therefore, there is an urgent need for targeted management practices and specific veterinary protocols to effectively reduce/prevent these infections.