

PULMONARY ASPERGILLOSIS IN AN ADULT BELGIAN BLUE COW

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Anamnesis

A 5-year old pregnant Belgian blue was admitted with the complaint of respiratory distress, cough and fever since one month. The animal was on pasture, and previously treated for lungworm with doramectin. Oxytetracycline and non-steroidal anti-inflammatory drugs were given. After a short period of improvement she relapsed 2 weeks later.

Clinical signs

Unilateral epistaxis was seen. Clinical examination showed decreased ruminal fill, arched back, pale mucosae and blood-stained nasal discharge. Adventitious lung sounds were heard on lung auscultation.

Diagnosis

Thoracic ultrasonography showed multiple consolidations, predominantly in the cranioventral part of the left and right lung. A broncho-alveolar lavage was performed and bacteriological culture and cytology was carried out. Mycosis was diagnosed by use of cytology (Figure 1). *Aspergillus fumigatus* was cultured on Columbia blood agar enriched with 5 % sheep blood and confirmed by MALDI-TOF MS.

Pathological findings

The animal developed a fatal pulmonary hemorrhage. On necropsy a metastatic pattern, with multiple foci of granulomatous lesions was seen (Figure 2).

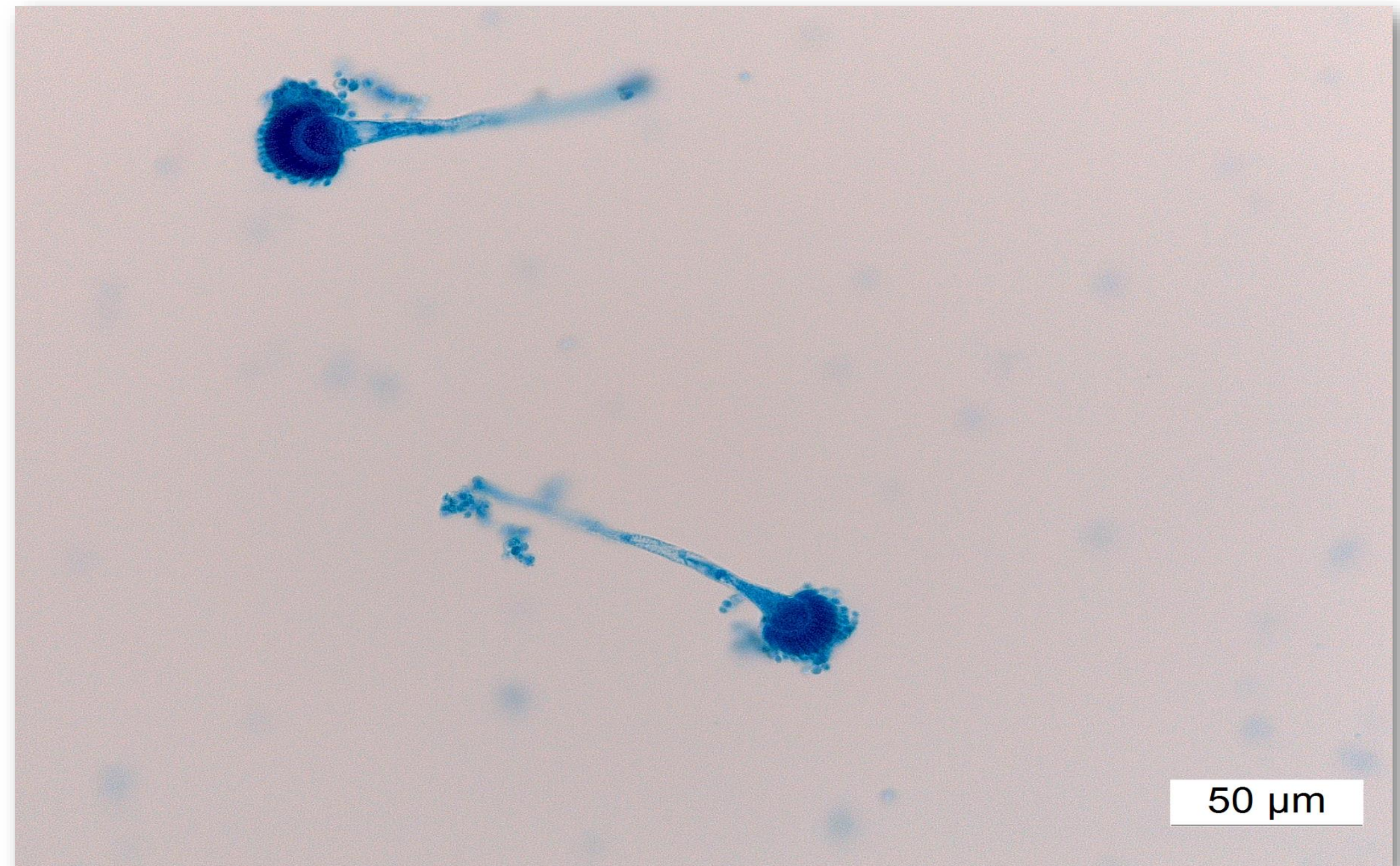


Figure 1: *Aspergillus fumigatus* isolated from broncho-alveolar lavage fluid and stained with Lactophenol Cotton Blue.

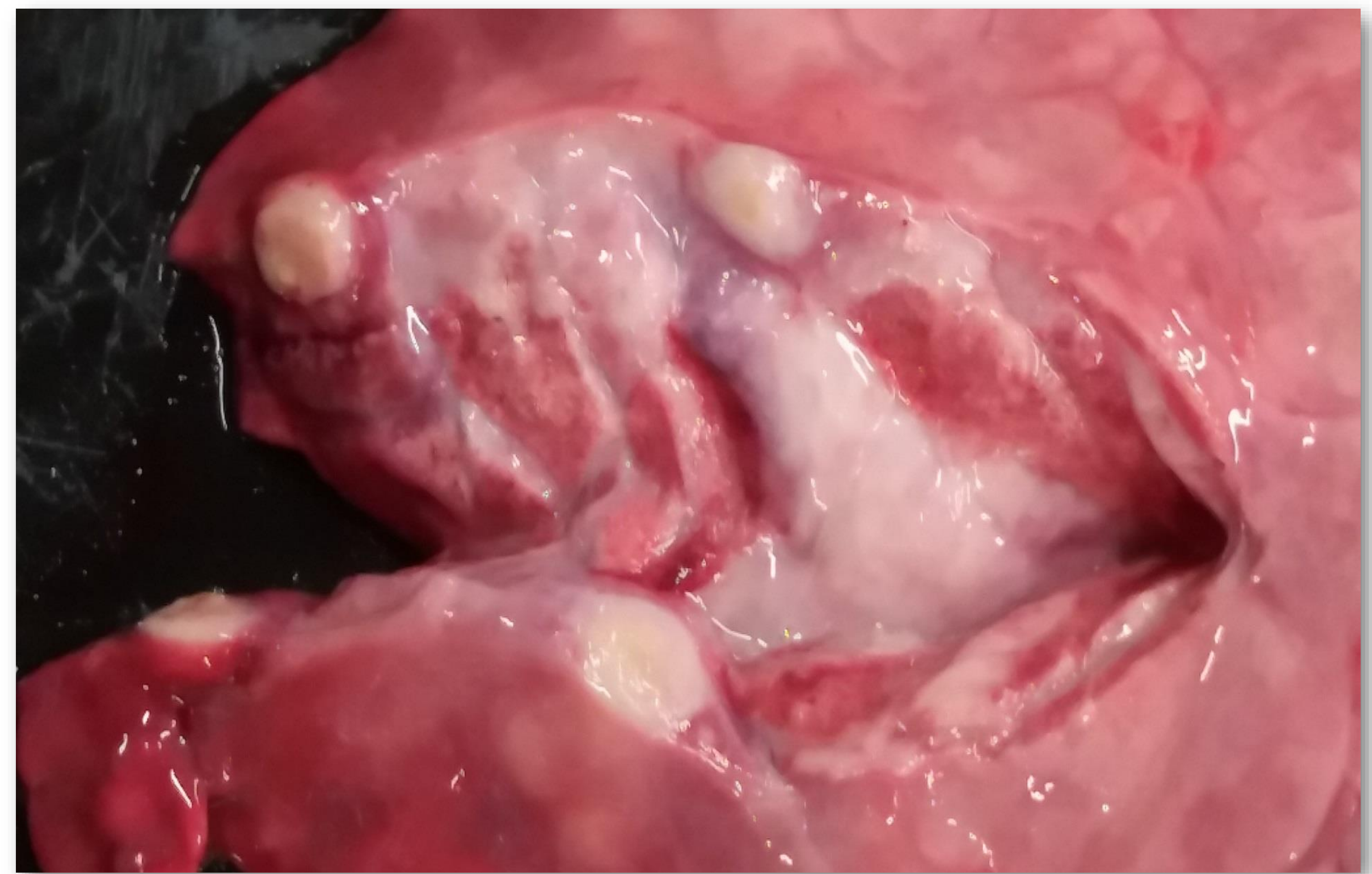


Figure 2: Multiple foci of granulomatous lesions.

Conclusion

Pulmonary Aspergillosis should be considered as a rare differential diagnosis for chronic, unresponsive bronchopneumonia in cattle, especially in case of epistaxis. Cytological examination of broncho-alveolar lavage can be used to confirm the diagnosis.