

PINNAL NECROHAEMORRHAGIC DERMATITIS WITH VASCULITIS AND INTRALESIONAL BACTERIA IN RABBITS



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INTRODUCTION

- Peculiar skin lesions, specifically targeting the ear pinna, have been sporadically recorded by the practitioners in different farms of commercial fattening rabbits
- Affected pinnae were reported to appear reddish, thickened and oedematous and/or

 haemorrhagic with the development, within a few days, of necrosis and pinnal
 deformation
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- The aim of this study was to analyze the pathomorphological features of these lesions and verify the possible presence of associated bacterial infections

- **MATERIALS & METHODS**
- Ten subjects were collected during 5 episodes of pinnal lesions manifested in 3 different farms and submitted for post-mortem examination
- FFPE samples of the affected pinnae were submitted to routine histopathological procedures (n=8)
- Swabs from the affected pinnae (n=6), from adjacent purulent lesions (n=3) and from central nervous system (CNS, n=6) were submitted to routine bacterial procedures
- RESULTS **EPISODE 1 EPISODE 2 EPISODE 3 EPISODE 4 EPISODE 5** Monolateral dry necrosis and pinnal Bilateral reddish discloration and Bilateral dark red discloration and Monolateral dark red discloration, Monolateral sharp ulceration/necrosis and controlateral ear base abscess (1 distortion (2 subjects) multifocal hyperkeratosis (1 subject) moderate thickening with edema. mild thickening (4 subjects) exudation, focal vesicle and purulent subject) otitis (2 subjects) Crusts/pustules with superficial Severe heterophilic and necrotizing Severe chronic mixed dermatitis Moderate ulcerative and fibrosing Severe chronic ulcerative dermatitis with cartilage necrosis and severe bacteria, moderate ortokeratosis dermatitis with vasculitis and with vasculitis, perivascular perivascular to interstitial chronic and mild interstitial chronic mixed thrombosis Gram-negative bacteria and mixed dermatitis with mild vascular fibrosis inflammation with (peri)vascular severe congestion damage, severe congestion and edema and severe congestion multifocal haemorrhages 2/2 mandibular abscesses PM+ 2/3 ear swabs PM + 2/2 ear swabs PM + Ear swab tested negative Ear base abscess PM + in Pasteurella multocida (PM) + 1/2 with visceral dissemination 1/3 in association with 2/2 with visceral dissemination association with SA (isolation of PM from CNS in (isolation of PM from CNS) Staphylococcus aureus (SA) from purulent rhinitis association with SA)

Additional gross findings included mucopurulent oculonasal discharge (n=10), purulent otitis (n=4), abscesses/cellulitis (n=5) and (fibrino)purulent (pleuro)pneumonia (n=3).

CONCLUSIONS

These cases of necrohaemorrhagic pinnal inflammation appear peculiar and associated with dermal vascular lesions. They differ from the classical apostematous pattern of cutaneneous pasteurellosis in rabbits, however, given the presence of intralesional Gram-negative bacteria and the isolation of PM, they may represent an unusual form of cutaneous pasteurellosis.