Mastitis and death of a Corriedale ewe associated with Mycoplasma spp. infection in Buenos Aires province

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INTRODUCTION

Mycoplasma spp. infections are associated with different clinical syndromes in ruminants, although clinical diseases associated with Mycoplasma-infections are scarce in small ruminants of Argentina. Contagious agalactia due to M. agalactiae and M. capricolum infection is exotic in the region, although M. agalactiae was detected by PCR. Therefore, strict surveillance of these pathogens is needed.

AIM

We report a case of severe mastitis and death of a 7-years-old Corriedale ewe in a flock from Buenos Aires province

MATERIALS & METHODS

Post mortem examination was carried out in an ewe that had delivered twin lambs 15 days before clinical disease was detected and died. Tissue samples were fixed in 10% buffered formalin solution for histopathological analysis. Mammary gland and lung was cultured in Columbia blood agar, Mc Conkey and Hafliks modified media. DNA was extracted from mammary gland and lung, a nested-PCR for Mycoplasma spp. was applied and amplicons were sequenced.

RESULTS

Post mortem findings: supramammary lymphadenomegaly; enlarged and firm mammary gland with cyanotic skin and superficial edema, and multiple caseous whitish foci in the mammary parenchyma (picture 1, arrow); similar caseous foci were observed in the caudal-ventral lobes of the right lung (picture 2, arrow).

Histopathology: chronic multifocal necrotizing severe mastitis and fibrinous bronchopneumonia with multifocal necrosis and fibrinous pleurisy.

Bacteriology: Mycoplasma spp. was isolated from the mammary gland in Hafliks modified media (picture 3).

PCR and sequencing: Mycoplasma spp. nested-PCR was positive. M. arginini and M. bovis in mammary gland and lung, were detected, respectively.

CONCLUSIONS

Pathological findings were similar to the described in cases of contagious agalactia, therefore, Mycoplasma speciation was decided in order to discard the presence of this exotic disease. M. arginini has been associated with mastitis in goats and it has been isolated from mammary gland and lung from sheep. M. bovis is commonly associated with pneumonia in lambs. Unfortunately, Columbia blood agar and Mc Conkey cultures were contaminated, therefore, the presence of other bacterial pathogens was not possible.