



BACTERIAL DISEASES

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UREAPLASMA DIVERSUM IN LUNGS AND LARYNGEAL SWABS FROM PIGS WITH AND WITHOUT PNEUMONIA

J. Seitz, I. Dolso, M. Bigolin, P. Camacho, A. Estanguet, F. Degano, P. Tamiozzo.

Universidad Nacional de Río Cuarto, Río Cuarto, Argentina.

Introduction

Ureaplasmas sp. are commensals or opportunistic pathogens of vertebrate hosts. *Ureaplasma diversum* colonizes the urogenital tract of cattle and has been associated with genital disorders in these mammals. Recently, *U. diversum* was detected in pneumonic lungs of swine (Burgher et al., 2014). However, little is known about its role in porcine respiratory disease complex (PRDC).

Material & Methods

The lungs of 78 pigs (from two different herds) were inspected at abattoir, looking for proliferative pneumonias. From each inspected lung, specimens for histopathological analysis and broncho-alveolar lavages (BAL) for PCR were collected. DNA from BAL specimens was extracted and a specie-specific PCR for *U. diversum* was performed (Vasconcellos Cardoso et al., 2000).

Results

U. diversum was detected in 10/78 (12.8%) of BAL specimens, 3/40 (7.5%) in pigs from one herd and 7/38 (18.4%) from the other one. Out of 10 positive ones, three showed no lesions; one showed interstitial pneumonia, and the remaining six showed different degrees of perivascular and peribronchiolar lymphoplasmacytic hyperplasia. Additionally, 20 laryngeal swabs taken at 22 weeks of age, were processed by PCR giving a positive result of 2 out of 20 (10%).

Discussion & Conclusion

Although *U. diversum* is considered a bovine ureaplasma, earlier defined as a non-pathogenic species but currently a pathogenic one, its crossing from bovine to swine has been suggested (Burgher et al., 2014). There are few antecedents in the literature about its presence in swine. Its identification has been reported in pneumonic lungs from Cuban pigs (Burgher et al., 2014), but there are no antecedents in the literature about its presence in larynx. In spite of the fact that pathogenic potential and circulation of the agent among pig populations remain unknown, this finding constitutes an important antecedent for further studies about *U. diversum* participation and role in PRDC.