

## THE LOWER RESPIRATORY INFECTION IN HUMANS CAUSED BY PASTEURELLA MULTOCIDA

Marcin Piorunek<sup>1</sup> DVM

Beata Brajer-Luftmann<sup>2</sup> MD, PhD

Tomasz Trafas<sup>2</sup> PhD

Halina Batura-Gabryel<sup>2</sup> MD, PhD, Prof.

Anna Schneider<sup>3</sup> Msc

Jarosław Walkowiak<sup>4</sup> MD, PhD, Prof.

1. Veterinary Practice Marcin Piorunek, Skórzewo, Poland
2. Department of Pulmonology, Allergology and Pulmonary Oncology, Poznan University of Medical Sciences, Poland
3. Microbiology Clinical Laboratory, Poznan University of Medical Sciences, Poland
4. Department of Pediatric Gastroenterology and Metabolic Diseases, Poznan University of Medical Sciences, Poland

**Background:** *Pasteurella multocida* is commonly occurring in the upper respiratory tract of healthy domestic pets, especially cats and dogs. People are infected by biting, scratching or direct contact with the animal's saliva. Inflammation develops in the wound and is usually limited to the skin and subcutaneous tissue. *P. multocida* may be the cause of respiratory tract infections and severe life-threatening complications.

**The aim** of the study was to identify the lower respiratory infection in humans caused by *P. multocida*, to determine the potential source of infection as well as the associated symptoms, comorbidities and applied treatment.

**Materials and methods:** Between January 2010 and September 2021, 14.258 patients underwent 16.255 routine flexible video bronchoscopy (FVB) and the same number BALF samples for microbiological examination were taken.

**Results:** Microbiological examinations of the BALF allowed for the identification only of 6 patients with *P. multocida* infection. All persons reported multiple scratches or bites and licking or kissing by their pets in the past. The predominant symptom was productive cough with expectoration of mucopurulent discharge.

**Conclusions:** The lower respiratory infection caused by *P. multocida* is not common in humans. It should be considered particularly in elderly patients with underlying disease and exposure to pets.