

## Abstracts der Posterbeiträge zur 38. VÖK-Jahrestagung



Fachtierärzte Althangrund, 1090 Wien, Österreich

## Spontaneous remission of *Mycobacterium fortuitum*-associated abdominal lymphadenitis in a British Shorthair Cat

L. Schindl, A. Rose, M. Pagitz

**Keywords:** *Mycobacteria*, cat, *Mycobacterium fortuitum*, abdominal lymphadenitis.

**Introduction:** This case report describes the first known occurrence of a *Mycobacterium fortuitum* infection in a cat, presenting with anorexia and abdominal lymphadenopathy, which underwent spontaneous remission without extensive antibiotic treatment.

**Case Report:** A one-year-old neutered male British Shorthair cat was presented for apathy, pyrexia, and anorexia. Clinical findings included an elevated body temperature of 39.6 °C, decreased skin turgor, and abdominal discomfort upon palpation. Laboratory results included mild, non-regenerative anaemia, hyperproteinaemia, and hyperglobulinaemia. Abdominal ultrasound revealed moderately enlarged mesenteric lymph nodes. Initial treatment consisted of intravenous fluids, Omeprazole, Sucralfate, Maropitant, Metamizol, Buprenorphine, and Amoxicillin Clavulanic acid, leading to improvement of the cat's condition. However, the cat relapsed a month later, displaying anorexia and vomiting. Due to ongoing leukocytosis and hyperglobulinaemia, an Amoxicillin Clavulanic acid regimen was administered for a total of six weeks, followed by a diagnostic laparotomy. Pathohistological examination of the mesenteric lymph nodes disclosed a high-grade, multifocal, chronic, pyogranulomatous lymphadenitis. Ziehl-Neelsen stain (ZN stain), PAS (periodic acid – Schiff) reaction and immunohistochemistry for FIP antigen came back negative. An infection by *Mycobacterium fortuitum* was confirmed by PCR and sequencing. After launching a multidrug antibiotic regimen, the owner ceased treatment after two days due to medication administration challenges. Thirteen months after initial presentation the cat is asymptomatic, gained weight and does not show signs of illness.

**Discussion:** The challenge in diagnosing mycobacterial infections lies in their often nonspecific clinical signs.

This case is notable for the spontaneous remission of *M. fortuitum* infection without comprehensive antimicrobial treatment, a rarity in veterinary and human medicine. In mycobacterial infections, it is often necessary to employ a regimen comprising multiple distinct antibiotics over a prolonged duration. *Mycobacterium fortuitum* strains have shown resistance to common antibiotics, yet studies suggest susceptibility to Aminoglycosides (Amikacin, Gentamicin), Trimethoprim Sulfadiazine, and Macrolides (Clarithromycin) (Greene & Gunn-Moore 2006; Gunn-Moore 2014; Krajewska-Wędzina et al. 2019).

**Conclusion:** This case report aims to underline the variability in clinical presentations among various mycobacterial species, emphasizing the necessity to conduct *Mycobacterium* testing in cases of pyogranulomatous lymphadenitis. There are multiple potential therapeutic approaches, all based on the combination of multiple antimicrobials, although often with uncertain efficacy. However, as demonstrated in this case, some patients exhibit improvement even without extended antibiotic therapy.

### References

- Greene CE, Gunn-Moore DA. Infectious diseases of the dog and cat. In: Jane Sykes BVSc, editor. Infectious diseases of the dog and cat. 5<sup>th</sup> ed. St. Louis: Elsevier; 2006. p. 723–727.
- Gunn-Moore DA. Feline mycobacterial infections. *Veterinary Journal*. 2014;201(2):230–238.
- Krajewska-Wędzina M, Dąbrowska A, Augustynowicz-Kopeć E, Weiner M, Szulowski K. Nontuberculous mycobacterial skin disease in cat; diagnosis and treatment – case report. *Annals of Agricultural and Environmental Medicine*. 2019;26(3):511–513.

Corresponding Author: Lena Schindl, E-Mail: lschindl@althan.vet