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RETROSPECTIVE STUDY ON PREVALENCE AND RISK FACTORS IN LOWER URINARY TRACT DISEASE IN CATS

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Abstract: Feline Lower Urinary Tract Disease (FLUTD) is a term used to describe a spectrum of disorders affecting the ureters, urinary bladder, and urethra, manifesting in symptoms like haematuria, pollakiuria, stricture, and urethral obstruction. Understanding the multifactorial causes of FLUTD is essential for developing effective treatment plans. Therapeutic management includes relieving symptoms, treating the underlying cause, and preventing future episodes. This requires a comprehensive approach, including dietary changes, creating a stress-free environment, and sometimes using medications.

This study aimed to evaluate FLUTD prevalence in cats, considering age, gender, breed, and environmental factors, and highlight associated laboratory findings. This study examined medical records from cats diagnosed with FLUTD at the University Veterinary Clinics (UVC) from the Faculty of Veterinary Medicine, Timisoara. The highest prevalence was found in European breed cats aged 3-5 years, with males being predominant. Idiopathic cystitis emerged as the predominant condition, with pollakiuria as the primary clinical sign. Additionally, renal biochemical parameters were frequently elevated above the upper reference values. This study provides valuable insights into the epidemiology of FLUTD and emphasizes the need for thorough diagnostic methods to achieve the best treatment outcomes.

Keywords: feline lower urinary tract disease, idiopathic cystitis, cats, pollakiuria.

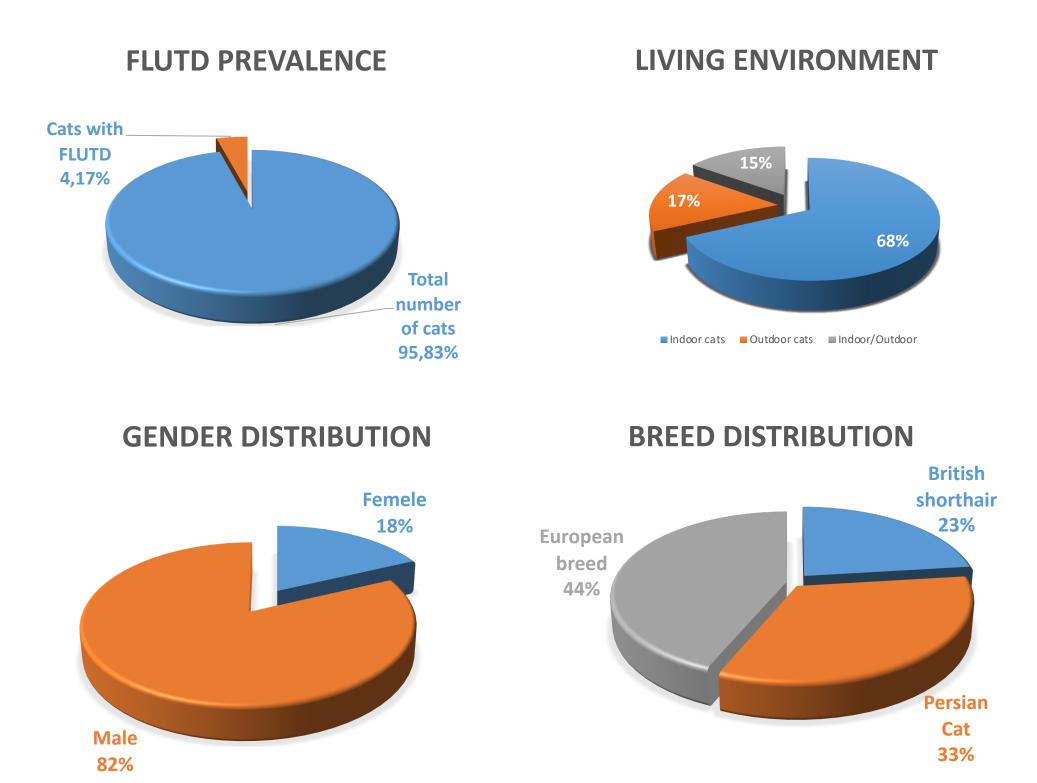
Introduction

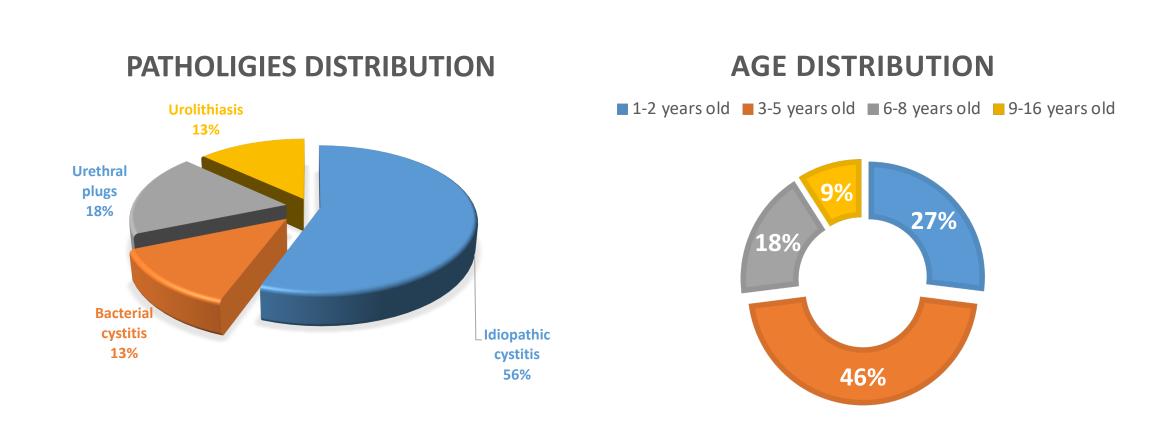
Feline lower urinary tract disease (FLUTD) is a term used to refer to conditions of the lower urinary tract components without identifying the problem with specificity. FLUTD includes a variety of disorders that can affect the ureters, urinary bladder and urethra, characterised by clinical signs including haematuria, pollakiuria and urethral obstruction. These pathologies occur as a result of metabolic disorders, infectious diseases, parasitic causes, trauma, genetic abnormalities, neoplasia or iatrogenic causes. In some cases where the etiology is uncertain, these pathologies are classified as idiopathic FLUTD. The aim of the present study was to evaluate the prevalence of feline lower urinary tract disease depending of age, gender, breed, and to highlight laboratory findings in cats presented for consultation with various lower urinary tract pathologies.

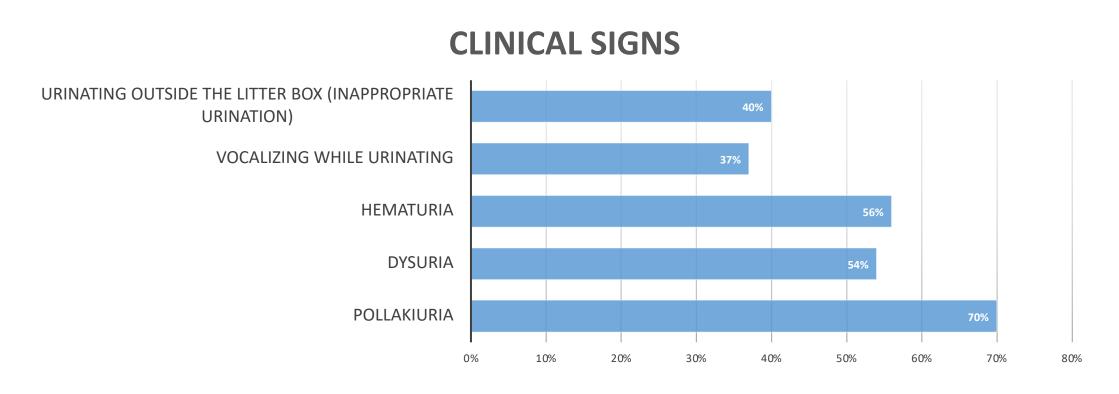
Material and method

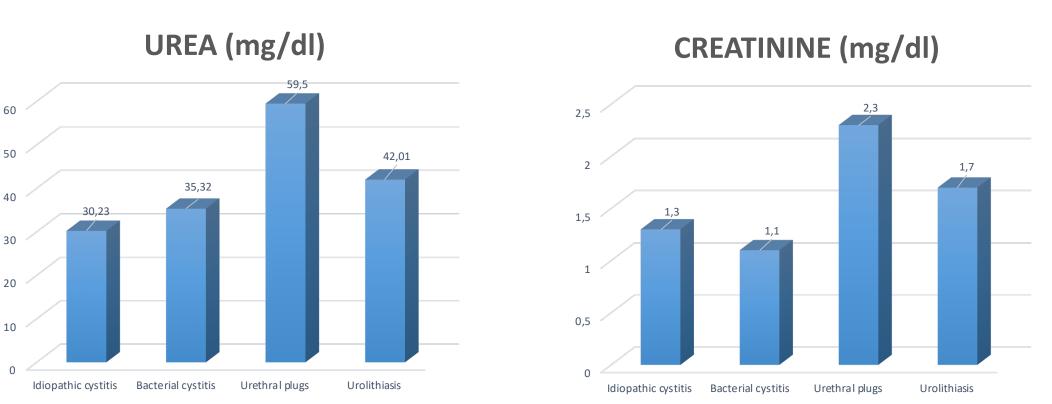
The medical records of 2010 cats presented at the University Veterinary Clinics (UVC) from Faculty of Veterinary Medicine, Timisoara from 2021 to 2023 were analyzed. The following data were registered for each patient: breed, age, gender, living environment and clinical signs as well as laboratory findings. From all the medical records, 84 cats were diagnosed with FLUTD, presenting different pathologies of the lower urinary tract.

Results and discussions









The highest prevalence was found in male European breed cats aged between 3-5. It is noteworthy that the majority of cats in this study suffered from idiopathic cystitis with pollakiuria as the primary clinical sign and renal biochemical parameters frequently elevated above the upper reference values.

Conclusions

In this study, idiopathic cystitis was the most common cause of FLUTD, followed by urethral plugs and urolithiasis.

Clinical signs based on which FLUTD can be suspected are pollakyuria, haematuria and inapppropriate urination behaviour.

In obstructive form of FLUTD, there is a risk of acute renal failure of post-renal cause resulting from blockage of urine flow through the urethra.

Male gender and indoor living environment were the main risk factors for developing FLUTD.