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Author: Babak Fayyazi

Title: Investigation of the ultrasonographic findings, urinalysis and clinical signs of referred cats with lower urinary system disorder.

Abstract

This study evaluated clinical, laboratory, and ultrasonographic indices in referred cats affected by lower urinary tract diseases. The investigation was conducted on 26 cats referred to the Veterinary Hospital of Urmia University over a four-month period, presenting with symptoms such as dysuria, painful urination, and hematuria. Bladder ultrasonography was performed, and standard images were recorded. Urine samples (10 cc) were collected via ultrasound-guided direct aspiration, followed by comprehensive urinalysis (including dipstick testing and sediment examination). Data were analyzed descriptively using SPSS software. Results indicated a mean age of 36.08 ± 20.30 months and a mean weight of 4.65 ± 1.15 kg among the cats. Domestic short-haired breeds (46.2%) exhibited the highest prevalence, with 88.5% of the cats being male. The most common clinical signs were pollakiuria and stranguria (each 26.9%). In urinalysis, proteinuria was observed in 92.3% of cases, and crystals (predominantly struvite) were detected in 62.5% of urinary sediments. Ultrasonographic findings included increased urine echogenicity in 96.2% of cases (with intensities ranging from 1 to 4), and echogenic sediments in 65.4% of bladders. Correlations among clinical, laboratory, and ultrasonographic data were examined, revealing potential associations among these indices in the diagnosis of feline lower urinary tract diseases.

Keywords: Cat, Ultrasonography, Urinalysis, bladder, strangury.