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## Urinary tract infection in a *Cavia porcellus*

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#### Abstract

Urinary tract infection is common in female guinea pigs because of their shorter urethras. A female guinea pig, aged 5 months and weighing 600gm was presented to the Teaching Veterinary Clinical complex, Post Graduate Institute of Veterinary and Animal Sciences, Akola with the complaint of haematuria. The case was diagnosed as urinary tract infection on the basis of history, symptoms, clinical examination and USG examination. The case was treated with antibiotics, NSAIDs and supportive treatment. The Guinea Pig showed complete recovery on 5<sup>th</sup> day of treatment.

**Keywords:** Guinea pig, urinary tract infection, haematuria

#### Introduction

Now a days people are keeping Guinea Pigs as a pet animal, especially in a metropolitan cities. However, due to lack of knowledge regarding good husbandry practices, these species of animal has been facing many health problems. Urinary tract infection is a common health problem in many species of pet rodents including Guinea Pigs. The exact reason for the occurrence of urinary tract infection in Guinea Pigs is not clearly understood. However, it is believed that the body of Guinea Pigs partially drags along the floor due to their short legs. Urinary tract infection is more common in female Guinea Pigs because of difference in the anatomical structure of urinary tract between male and female [1]. In female Guinea Pigs urethras are shorter than that of males and the urethra of female is close to the anus, so that gastrointestinal bacteria may enter the urethra and may cause urinary tract infection [2, 3]. Normally most of the bacteria are washed away before they invade the urethral mucosa by the passage of urine but injury of the mucosa and stagnation of urine are important predisposing factors [3, 4]. Similarly poor husbandry practices is one of the contributing factor to the urinary tract infection in Guinea Pigs. Diagnostic principles and management regimens for these species are essentially same as those used for dogs and cats with urinary disease [5]. A case of urinary tract infection in Guinea Pig was managed successfully and is being presented in present case report.

#### Case history and clinical examination

A pet Guinea Pig, aged 5 months and weighing 600gm was presented to the Teaching Veterinary Clinical Complex, Post Graduate Institute of Veterinary and Animal Sciences, Akola with the complaint of inappetence, lethargy, squeaking while urinating and haematuria (Fig. 1) over 2 weeks. The clinical examination revealed rise in rectal temperature (104°F), slight dehydration, no abdominal distension and pain on palpation. The case was suspected for urinary calculi or urinary tract infection on the basis of history, clinical signs and examination. Ultrasound sonography was carried out to rule out urinary calculi in the urinary system. There was no evidence of presence of urinary calculi in the urinary system on USG examination.



Fig 1: Haematuria before treatment

## Treatment and Discussion

The case was diagnosed as a urinary tract infection on the basis of symptoms, clinical examination and USG examination. The Guinea Pig was treated with the long acting antibiotic, Enrofloxacin@10mg/kg BW SC; Meloxicam @ 0.3mg/kg BW SC. An enrofloxacin was given on every alternate day, 3 injections were given, while meloxicam were given on every day for 6 days. Supportive treatment was given with Neuroxine M (0.1ml SC) and Vitamin C (0.1ml SC). The Guinea Pig showed remarkable improvement on 2<sup>nd</sup> day of treatment as haematuria disappeared and started to void normal urine (Fig. 2). The animal recovered completely on 5<sup>th</sup> day of the treatment.

Urinary tract infection in Guinea Pigs most of the time occurs concurrently with the presence of urinary calculi. But in this case there is no evidence of presence of urinary calculi. Urinary tract infection is more common in the female Guinea Pigs than male because the urethra of female is close to the anus due to this, the intestinal bacteria are likely to enter the urethra and the urinary bladder and cause infection [2, 3].

In the present case enrofloxacin was given with supplement therapy resulted into complete recovery in Guinea Pig.



**Fig 2:** Normal Urine after treatment



**Fig 3:** Guinea Pig after treatment

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