An unusual urinary tract infection!

S. Shakoor, M.A. Beg*

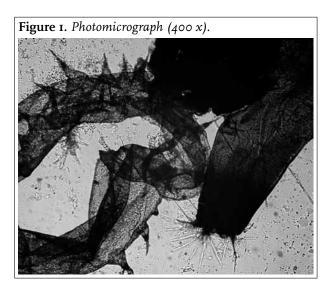
Department of Clinical Microbiology, Aga Khan University Hospital, Karachi, Pakistan, *corresponding author: e-mail: masim.beg@aku.edu

CASE REPORT

A 30-year-old lady presented to the specialist parasitology diagnostics department in Karachi, Pakistan, with a complaint of having noticed 'eggs' in her urine. She had been diagnosed previously as having 'schistosomiasis' at a peripheral diagnostic laboratory. Past medical history was significant for a laparotomy for uterine perforation one year ago, and her husband also reported her to have presented previously to many physicians with multiple symptoms including abdominal pain and dysuria. 'Motile eggs' had often been seen in the patient's urine over the past six months, which appeared typically when she was dehydrated and passed less urine than normal. Her dysuria was intermittent. Several concentrated microscopy smears of the urine were negative for schistosoma eggs, and the patient was reassured. However, on the insistence of the patient's husband, the first submitted specimen was re-examined for 'motile worms'. Gross examination of the specimen showed a small (0.5 cm) segmented 'worm'. Microscopy revealed the diagnosis (figure 1). The patient was subsequently advised to undergo cystoscopy and bladder biopsy to confirm the unusual infestation.

WHAT IS YOUR DIAGNOSIS?

See page 326 for the answer to this photo quiz.



© Van Zuiden Communications B.V. All rights reserved.

OCTOBER 2010, VOL. 68, NO 10 323

ANSWER TO PHOTO QUIZ (PAGE 323) AN UNUSUAL URINARY TRACT INFECTION!

DIAGNOSIS

The photomicrograph reveals a distorted fly larva with several spines projecting from its anterior end. Infestation of human tissue by fly larvae is termed myiasis.¹ The larva was examined after a 48-hour delay and hence its morphology was not preserved. Genus determination based on chitinous plates at its posterior end was also not conclusive for the same reason.

Urinary infestation is a rare manifestation of myiasis¹ and only a few cases have been reported in literature. Most cases are due to poor personal hygiene.² Cases following surgery on the urogenital tract have also been reported.³ This was also the likely predisposing factor in our patient. However, the bladder biopsy was not submitted to our centre and hence a confirmatory diagnosis of urinary myiasis could not be made. Cases of myiasis are usually diagnosed after prolonged antibiotic therapy of symptoms and due to the unusual features of the larvae, the diagnosis may be missed by physicians and microbiologists.^{1,4} Awareness of such cases by lab technicians and physicians facilitates rapid diagnosis.

Treatment of myiasis consists of manual or surgical removal of the fly larvae.¹ This was explained to the patient and further management was deferred until definitive diagnosis by cystoscopy and biopsy.

REFERENCES

- Murray PR, Barren EJ, Jorgensen JH, et al., editors. Manual of Clinical Microbiology. 9th ed. ASM Press 2007.
- Perez-Eid C, Mouffok N. Human urinary myiasis caused by Fannia canicularis (Diptera, Muscidae) larvae in Algeria. Presse Med. 1999;28:580-1.
- Hyun DY, Cain MP, Blue-Hindy DE, et al. Urinary myiasis associated with urethral stent placement. Pediatr Infect Dis J. 2004;23:179-81.
- Caissie R, Beaulieu F, Giroux M, et al. Cutaneous myiasis: diagnosis, treatment, and prevention. J Oral Maxillofac Surg. 2008;66:560-8.

© Van Zuiden Communications B.V. All rights reserved.