

## Vesical Hirudiniasis A Rare Case Report

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### INTRODUCTION

Hirudiniasis, which is rare with unusual symptoms, is caused by accidental introduction of leeches through natural orifices. Leech is an invertebrate having a tendency to enter the body through natural orifices. A few studies have reported internal hirudiniasis found in the nasal cavity, pharynx, larynx, tonsils, rectum, and urinary bladder.<sup>(1-5)</sup> Vesical hirudiniasis can be considered as an unusual cause of profuse hematuria. We present one case of vesical hirudiniasis causing hematuria.<sup>(6)</sup>

### CASE REPORT

A 16-year-old boy presented with a history of sudden pain in the lower abdomen and hematuria after returning from farming in a waterlogged paddy field. On clinical examination, there was tenderness in the suprapubic area. He was hemodynamically stable.

Ultrasonography revealed a tubular, 8.5 cm long nonshadowing structure with highly echogenic wall and less echogenic center on the left posterior wall of the urinary bladder. Cystourethroscopy under general anesthesia showed the urinary

bladder cavity containing blood clot, which was evacuated. One large tubular reddish structure suggestive of leech was found on the posterior wall of the urinary bladder with oozing from the bladder wall.

We tried to remove the leech cystoscopically with an endoscopic forceps, but we were unsuccessful. Thereafter, the patient was catheterized with Foley catheter and 50 mL normal saline was instilled inside the bladder through the catheter, which was then clamped for 3 hours. The catheter was then removed and we waited for 24 hours expecting expulsion of the leech per urethra.<sup>(5)</sup> But the leech did not come out per urethra and hematuria persisted.

Therefore, suprapubic cystostomy was performed. On entering the

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Leech is being taken out of the urinary bladder.

bladder cavity, the swollen dead leech about 10.5 cm long was found to be lying against the posterior bladder wall with active bleeding from the bladder wall, where the leech was fixed to. The leech was removed, the bleeding site was cauterized, and the bladder and then the abdomen were closed in layers (Figure). Postoperative recovery was uneventful.

## DISCUSSION

The leech is a blood sucking worm belonging to the class Hirudinea of the phylum Annelida. Leeches are commonly found in the waterlands of temperate and tropical countries. They can swim or crawl by looping movements entering the human body, like the urinary bladder, through natural orifices, like the urethra. Leech usually sucks blood from the body surface and releases anticoagulant at the site of bite, which is responsible for prolonged bleeding.<sup>(6)</sup>

Very few cases of vesical hirudiniasis have been reported in literature, all from Asian countries. Alam and colleagues have reported the largest series of 43 subjects from Bangladesh. All of their

patients were treated with intravesical instillation of normal saline followed by spontaneous expulsion of dead leeches per urethra.<sup>(5)</sup> But in our subject, leech did not come out per urethra after intravesical saline treatment; hence, it was removed by suprapubic cystostomy.

## CONFLICT OF INTEREST

None declared.

## REFERENCES

1. Gupta SC. Nasal hirudiniasis in Kumaon Hills, India. *Trop Geogr Med.* 1980;32:303-5.
2. Raj SM, Radzi M, Tee MH. Severe rectal bleeding due to leech bite. *Am J Gastroenterol.* 2000;95:1607.
3. Mohammad Y, Rostum M, Dubaybo BA. Laryngeal hirudiniasis: an unusual cause of airway obstruction and hemoptysis. *Pediatr Pulmonol.* 2002;33:224-6.
4. Paul AK, Islam N. Vesical hirudiniasis: an unusual cause of bleeding from the urethra. *J Ultrasound Med.* 2005;24:1731-3.
5. Alam S, Das Choudhary MK, Islam K. Leech in urinary bladder causing hematuria. *J Pediatr Urol.* 2008;4:70-3.
6. Deka PM, Rajeev TP. Unusual cause of hematuria. *Urol Int.* 2001;66:41-2.