



## Case Report

### YOUNG BOY WITH HEMATURIA FOLLOWED BY ACUTE URINARY RETENTION

S Z KHAN<sup>1</sup>, MAU HUQ<sup>2</sup>, T HOSSAIN<sup>3</sup>, MA ROUF<sup>4</sup>

#### Abstract:

Acute frank hematuria followed by urinary retention in paediatric patients commonly occurs after trauma. A young boy hailing from a lake district of Bangladesh suffering from acute frank hematuria followed by urinary retention and painful abdominal swelling was evaluated by cystoscope. An intra-vesical dead leech was found and removed by a small suprapubic incision under cystoscopic guidance.

**Key words:** Hematuria, Acute urinary retention, Leech in urinary bladder, cystoscopy guided removal.

#### Introduction:

Acute urinary retention in young boys may arise from various pathologies. Hematuria is also a common urological complain. Frank hematuria followed by acute urinary retention can occur due to vesicle calculi, trauma and a mysterious cause that the described case presented with.

#### Case report:

Our patient Al-Amin, 6 years of age, weighing 18 kg, muslim, male, circumcised boy hailing from Hobiganj admitted in DMCH under PSU-I on 24th November, 2015 with the complaints of-

1. Passage of blood mixed urine for 3 days
2. Unable to urinate for 14 hrs
3. Painful lower abdominal swelling for 12 hrs

According to the patients father he was apparently well 3 days back, then he developed above mentioned complaints. His symptoms were not associated with fever, vomiting and loin pain. He gave history of fall from a bench 3 days back, which he could not recollect clearly. He does not give previous history of such or any other urinary complain. His bowel habit was normal. On examination patient's vitals were normal. He was distressed due to lower abdominal pain. Abdomen was soft, not distended, and tender on suprapubic area. Bladder was distended. An 8 Fr bi-channel foley's catheter was introduced and about 1 litre urine came out at once. Urine was clear. Pain subsided immediately after catheterization. P/R and external genitalia examination revealed no abnormality.

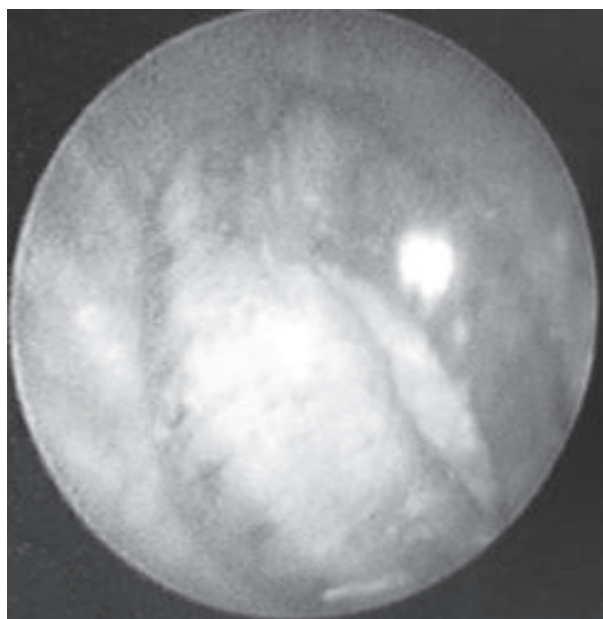
CBC, Urine R/E, S. Creatinine, S. Electrolyte and bleeding & coagulation profile was within normal limit. X-Ray KUB region revealed no abnormality. His blood group was AB+ve and one unit blood was screened and cross matched.

Patient was prepared for cystoscopic evaluation on the following day. After proper sign in and time out, we introduced a well lubricated 8.5 Fr scope without any difficulty; urethra was visualized and normal in caliber with no stricture. In the bladder we observed a dead swollen leech was floating in the sea of urine [Fig 1]. No active bleeding seen. Leech was so big that it could not be removed by cystoscope, so we

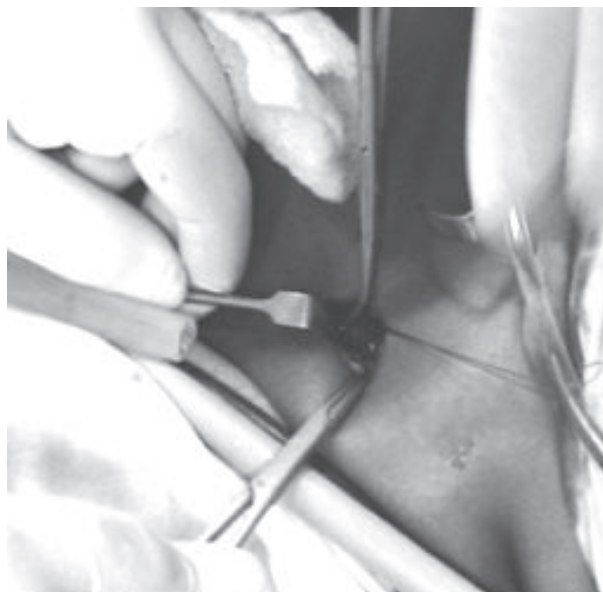
1. Dr. Sifat Zereen Khan, MS II part student, Department of Paediatric Surgery, Dhaka Medical College Hospital, Dhaka.
2. Prof. Md. Ashraf Ul Huq, Professor & Head of Department, Department of Paediatric Surgery, Dhaka Medical College Hospital, Dhaka.
3. Dr. Tahmina Hossain, Assistant Professor, Department of Paediatric Surgery, Dhaka Medical College Hospital, Dhaka.
4. Dr. Md. Abdur Rouf, MS Thesis Part, Department of Paediatric Surgery, Dhaka Medical College Hospital, Dhaka.

**Correspondence to:** Dr. Sifat Zereen Khan, MS II part student, Department of Paediatric Surgery, Dhaka Medical College Hospital, Dhaka. E-mail: sif1049@yahoo.com

gave a small incision in the suprapubic region and took it out by cystoscopic guidance. Urinary bladder was closed in single layer with interrupted stitches with 4/0 R/B Polyglactin [Fig 2]. No drain kept in suprapubic space. Abdominal wall closed in layers. Incision was injected with 2% Lidocaine. Recovery from general anaesthesia was smooth. His immediate and early post-operative period was uneventful. An 8 Fr



**Fig-1:** Cystoscopic view showing dead swollen leech.



**Fig.-2:** Removal of dead leech through abdominal

indwelling urethral catheter kept in situ for 7 days. Stitches and catheter were removed on 7th POD. Patient was in good health with no urinary complaints or urine leak from abdominal wound in his follow up visit after 2 weeks.

#### **Discussion:**

Alam S, Das Choudhary MK and Islam K in their study described catheterization and irrigation of the urinary bladder with normal saline is a relatively simple, safe and inexpensive method of removing the leech and controlling hematuria<sup>1</sup>. In case of our patient no such history of accidental leech entry per urethra given. Conversely after repeated query patient's parents gave us a vague history of trauma.

None of the enrolled patient of above mentioned intervention study gave history of retention. Dead leech was passed through urine within 24 hours in all the patients, but our case came to us after 72 hours. Thus efficacy of catheterization and irrigation of the urinary bladder with normal saline is questionable in this particular case.

According to Banu T et al cystoscopic removal can be a useful technique for the removal of leeches from the urinary tract when saline irrigation fails. In their study all patients underwent saline irrigation through urethral catheter. When saline irrigation failed, cystoscopic examination was done with removal of leeches by flexible graspers<sup>2</sup>. So, surgical intervention in our case was needful. As the dead oedematous leech could not be comprehended with flexible grasper, an abdominal approach with small incision was made to remove the culprit.

#### **Conclusion:**

Cystoscopy guided abdominal approach to remove of intra-vesical leech is an innovative and novel solution to a unique and uncommon problem.

#### **References:**

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