Bladder Stone after Intravesical Hem-O-Lock Clip Migration 2 Years Following Laparoscopic Radical Prostatectomy

Soufiane Habyebete1 *, Ahmed Ameziane1, Ali Akjay1, Khalid Lmezguidi1, Abdelghani Ammani1, Jihad El Anzaoui1

1Urology Department, Military Hospital Moulay Ismail, Meknes, Morocco

DOI: 10.36347/sjmc.2024.v12i05.038 | Received: 01.03.2024 | Accepted: 05.04.2024 | Published: 17.05.2024

*Corresponding author: Soufiane Habyebete
Urology Department, Military Hospital Moulay Ismail, Meknes, Morocco

Abstract

Intravesical Hem-O-Lock clip (HOLC) migration leading to stone formation after laparoscopic radical prostatectomy is a rare and uncommon complication. We report a case of bladder stone which developed around hem-o-lock clip 2 years after laparoscopic prostatectomy.

Keywords: Laparoscopic Radical Prostatectomy, Hem-O-Lock Clip, Metal Clip.

Intravascular Hem-O-Lock clip (HOLC) migration leading to stone formation after laparoscopic radical prostatectomy is a rare and uncommon complication. We report a case of bladder stone which developed around hem-o-lock clip 2 years after laparoscopic prostatectomy.

CASE

A 65 year old man was operated for low risk prostate adenocarcinoma by laparoscopic radical prostatectomy (LRP). 2 years after he was admitted to our clinic with a complaint of dysuria and hematuria. Bladder ultrasonography was performed showing a 1.5 cm intravesical lithiasis. The calculus was attached to the neck of the bladder (Fig 1). It was fragmented by LASER Ho: YAG (Fig 2). During the procedure the Hem-O-Lock clip was identified at the core of the calculus (Fig 3) and removed by an alligator grasper (Fig 4).

Fig. 1: calculus attached to bladder neck

Fig. 2: Fragmented bladder calculus

Fig. 3: Hem-O-Lock clip at core of calculus

Fig. 4: Alligator grasper removing Hem-O-Lock clip from calculus

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.
DISCUSSION

It seems that surgical clips can migrate and contribute significantly to the formation of bladder stones and other uncommon complications after radical prostatectomy.

Yi JS et al., reported in a retrospective study of 641 patients; who underwent open retropubic prostatectomy (n=439), laparoscopic prostatectomy (n=49), and robot-assisted laparoscopic radical prostatectomy (n=153); two patients had a bladder stone formed around metal clip 13 and 17 month after surgery [2]. Mora et al., reported a case of intravesical migration.
and subsequent calculus formation with the spontaneous expulsion of a Hem-o-lok clip after LRP [2].

Other complications such as bladder neck contracture, recurrent acute urinary retention, lower urinary tract symptoms, perineal pain and spontaneous expulsion of HOLC were also reported in the literature [3, 4].

The mechanism underlying the migration of a surgical clip into the bladder is unclear [5]. Our patient was admitted 2 years after LRP for LUTS, kidneys, ureters, bladder (KUB) X-Ray was normal because the HOLC and the stone was radio-transparent, diagnosis was made by ultrasonography.

**CONCLUSION**

By these findings we recommend the next

- Using less HOLC and metal clip near the vesicourethral anastomosis
- Promote the use of safer energy such as ultracision if we do not want to keep neurovascular bandels.
- Thinking about clip migration when faced with unusual lower urinary tract symptoms after LRP

**Funding:** None

**Consent:** Written informed consent was obtained from the patient for publication of this case report and any accompanied images

**Ethical Approval:** No ethical approval needed.

**Declaration of Competing Interest:** The authors declare that they have no conflict of interest.

**Acknowledgements:** The work has been reported in line with the CARE criteria for case reports.

**REFERENCES**


