Author's response to reviews

Title: Hem-O-Lok clip: a neglected cause of severe bladder neck contracture and consequent urinary incontinence after robot-assisted laparoscopic radical prostatectomy.

Authors:

Luigi Cormio (luigicormio@libero.it)
Paolo Massenio (p.massenio@alice.it)
Giuseppe Di Fino (giuseppe_difino@libero.it)
Oscar Selvaggio (oscarsel@libero.it)
Salvatore Micali (micali.salvatore@unimore.it)
Giuseppe Carrieri (giuseppe.carrieri@unifg.it)

Version: 2
Date: 2 January 2014

Author's response to reviews: see over
Dear Hayley Henderson,

we would be very grateful if you would consider the possibility of the enclosed manuscript entitled "Hem-O-Lok clip: a neglected cause of severe bladder neck contracture and consequent urinary incontinence after robot-assisted laparoscopic radical prostatectomy" being re-evaluated for publication in your Journal.

We re-wrote the manuscript following the precious comments and suggestions of your Reviewers, which we would to thank for their valuable work. The most important changes to the manuscript are reported below, in a point-by-point reply towards Reviewers’ comments.

Our manuscript summarizes available information on incidence, treatment and outcome on hem-o-lok clip-related bladder neck contracture and is the first to point out the potential of such complication to result into stress urinary incontinence. We believe it could be of interest for the Readers of your Journal and look forward to hearing from you.

Sincerely,

Luigi Cormio, MD PhD
on behalf of all authors
**Reviewer:** Souhil Lebdai

This is an interesting and well written case report with interesting iconography. However a few points have to be discussed.

---

1-Was the clip in contact with the sphincter? You said that the clip was strongly attached to the area between the vesico-urethral anastomosis and the urethral sphincter.

Yes, the clip was parallel to the urethral lumen and occupied the region between the proximal part of the urethral sphincter and the distal part of the vesico-urethral anastomosis. We now wrote:

Urethroscopy showed a hem-o-lok clip within the lumen of the urethra between the proximal part of the urethral sphincter and distal part of the vesico-urethral anastomosis (Fig. 1). The urethral sphincter looked functional but its white appearance at 12-o-clock position suggested some fibrotic reaction to the presence of the clip (Fig. 1A); conversely, the distal part of the vesico-urethral anastomosis looked strictured over the clip (Fig. 1B).

---

2-Since the clip was first removed and then the stricture resected: don't you think that the incontinence may be the consequence of a too large resection of the stricture or an accidental injure of the sphincter? In other words could it have been avoided or was it technically impossible to spare the sphincter? This should be mentioned in the discussion.

*This is an interesting point. We now wrote:*

Our case had to be dealt with cold-knife urethral incision to remove the clip, and wide bladder neck resection. It is difficult to establish whether incontinence was due to a too large resection of the stricture causing an accidental injure to the sphincter or the sphincteric function having been jeopardised by a fibrotic reaction to the presence of the clip itself, as suggested by the whitish appearance of the urethral sphincter at 12-o-clock position. Whatever the case, our patient did not require self catheterization to prevent recurrence but developed urinary incontinence that was made even more bothersome by the fact that he had regained continence already one month after radical prostatectomy.

---

3-You should describe the urethroscopy sphincter aspect before and after the procedure: did it seem functional before the clip ablation or after the clip removal before you started the resection?

*Again, an interesting point. We now wrote:*

The urethral sphincter looked functional but its white appearance at 12-o-clock position suggested some fibrotic reaction to the presence of the clip (Fig. 1A) ... At the end of bladder neck resection the urethral sphincter continued to look functional.
As mentioned above, one could argue that urinary incontinence could have been the result of both the sphincteric dysfunction due to the fibrotic reaction of the sphincter area or reduced bladder neck resistance resulting after its wide resection or both; independently, clip-related BNC led in our case to a well-documented stress urinary incontinence.

4-Could the one month continence be the consequence of an early stricture? Did the flow decrease at that time?

*It is likely but it is difficult to establish; the patient did not report a decreased urinary flow and was happy for his "early continence".*

5-Do you have any urodynamic data one month after radical prostatectomy in order to confront it with the post-operative data?

*As mentioned above, he was happy for his "early continence"; therefore, there was no reason for any urodynamic assessment.*

6-About the case presentation section: this section should present the case, as well as a discussion with references to the literature. You should remove the discussion from the conclusion and put it in this section.

*This has now been done.*

7-You did not give any precise data about clip migration in the literature. Do you have an idea of its incidence? How long was usually the interval after prostatectomy? The clips that were not expelled: were they removed? Are continence data provided?


*Thank you very much for these precious suggestions. We added Yi et al. paper to our reference list and reviewed all available cases of hem-o-lok clip-related BNC, providing data on incidence, treatment and outcome of this complication. We now wrote:*  

BNC represents an uncommon yet unpleasant clip-related complication. BNC following hem-o-lok clip migration was first described by Blumenthal et al [1]; in their series of 524 RALPs, 2 patients (0.4%) had a hem-o-lok clip-related BNC. The first, dealt with clip removal and KTP laser vaporization of the stricture, ended up to be continent but on self-catheterization to prevent stricture recurrence; the second, dealt with clip removal and transurethral incision with steroid injection, also ended up on self catheterization to
prevent stricture recurrence yet used 1 pad/day for an undefined form of incontinence. More recently, Yi et al. [10] reported hem-o-lok clip-related BNC in 2 (1.3%) of the 153 patients they treated with RALP. Both cases were successfully managed by clip removal and a single urethral dilatation; both did not require self-catheterization and ended up in no recurrence nor urinary leak.

**Reviewer:** Joshua Meeks

This article describes migration of weck clip. This is very common and usually occurs with poor anastomosis. Did the patient have a anastomotic leak after surgery? The main conclusion is to avoid a urine leak during a surgery.

Reviewing the literature, this complication does not seem to be so common, ranging from 0.4% in Blumenthal et al. series to 1.3% in Yi et al series. Maybe this complication is under-reported. Whatever the case (rare or under-reported), our report provides the new information that such complication may end up into stress urinary incontinence. We agree that anastomotic leak should (obviously) be avoided; our patient had no clinical evidence of leaking but we cannot provide any cystogram to support this, as this investigation is not routinely carried out in the hospital where he was operated on.