Bladder Neck and Urethral Erosions after Macroplastique Injections

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INTRODUCTION

- Given the current controversies surrounding synthetic tapes for the management of SUI, there has been an increased emphasis on alternative techniques such as urethral bulking agents.
- Several bulking agents currently exist with most demonstrating promising short term results however long term data is limited.
- Macroplastique® (polydimethylsiloxane injection, MPQ) is a minimally invasive urethral bulking agent and with over 20 years of data, deemed to be 'effective, durable, and a safe treatment option' in a recent meta-analysis¹.
- Despite very few reports of complications within the literature, we have encountered an increasing number across both sites

METHODS

- Retrospective data collection from a prospectively maintained database at both sites
- > Database at York from Jan 2012 March 2019 and from 2016 2018 at UT Southwestern Medical Centre

RESULTS

- Total of14 patients identified
- All patients presented with recurrent UTIs
- ➤ All had cystoscopic evidence of MPQ erosion 3 involved bladder neck/bladder
- > 12 underwent transurethral resection, 3 required a re-do.
- > 9 of the 12 patients who had a resection had complete resolution of their recurrent UTI's
- > 9 of the 12 patients had recurrent SUI with 4 requiring a subsequent Autologous Fascial Sling for resolution of symptoms





Figure 1: Cystoscopic view of MPQ erosion at the bladder neck before and 3 months post resection

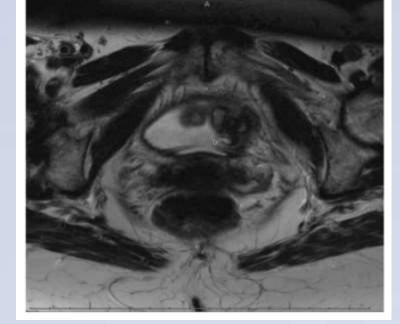


Figure 2: Axial view MRI demonstrating erosion of MPQ into the left bladder neck/bladder

CONCLUSIONS

- Although MPQ erosions are reported as rare, we are seeing a growing number across both centres
- Time delay between injection and erosion variable most common presentation is recurrent UTIs
- > Recurrent UTIs can be successfully treated with resection of the eroded MPQ.
- > Bipolar resection is recommended, as Monopolar resection is challenging due to the insulating property of MPQ'S silicone chemical make-up.
- Following resection, patients are highly likely to develop recurrence of their SUI and need to be appropriately counselled.

REFERENCES

1. Ghoniem GM, Miller CJ. A systematic review and meta-analysis of Macroplastique for treating female stress urinary incontinence. Int Urogynaecol J. 2013 Jan;24(1):27-36