Intravesical Onabotulinum Toxin A Injections in patients on antiplatelet and anticoagulation therapy

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Introduction

- Botox is well established in the management of idiopathic and neurogenic detrusor over-activity (IDO and NDO).
- Paucity of evidence on safety in anticoagulated patients cessation of which may be clinically detrimental.
- Current NICE and EAU guidelines on the use of intravesical Botox do not specify whether anticoagulants/ antiplatelets should be stopped.
- Several trials on intravesical Botox either exclude anticoagulated patients or stop anticoagulation due to the risk of bleeding

Botox in other muscle groups

No published data to date regarding the safety of intravesical Botox in patients on anticoagulation / antiplatelets.

In a consensus statement of Canadian physicians who regularly use intramuscular Botox for limb spasticity, it was concluded that injections could be safely given without discontinuing warfarin or NOAC's.

In a study assessing the frequency of haematomas, 32 patients received **IM Botox for blepharospasm/ hemi facial spasm/ post stroke spasticity** whilst on anticoagulation with a mean INR of 2.6. ...**concluded that interruption of anticoagulant therapy was unjustified. (4 year follow up).**

Aims

- Review the number of significant bleeding events after intravesical Botox injections in patients with concurrent AC/AP treatment.
- Determine what the bleeding risk is in these patients to determine whether it necessitates cessation of AC/AP prior to intravesical Botox injection.

Methods

A retrospective review of patients having intravesical Botox in 3 teaching hospitals from 2016 to February 2018 was conducted.

The records of the anticoagulated population reviewed retrospectively to identify the number of separate Botox procedures done whilst on AC/AP.

Demographic data, indication for intravesical Botox injection, and side-effects of significant bleeding requiring intervention were recorded.

Results

Results Summary

- 532 patients in total
- 63 patients on AC/AP: 33 male, 30 female
- Mean age: 69 (19-89)
- 114 separate procedures on AC/AP evaluated.
- Each patient had 1-7 procedures.
- Botox dose: 100U 300U

Anticoagulant / Antiplatelet Use

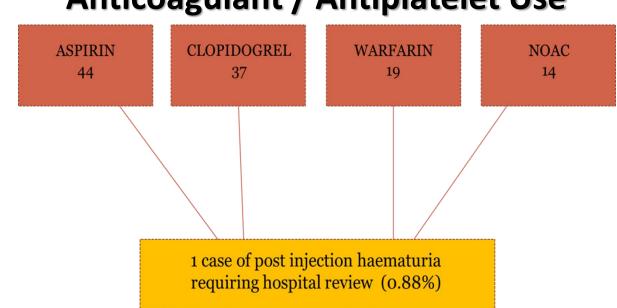


Table 1: Botox sessions.

	No of Botox Rounds						
Round number	1	2	3	4	5	6	7
Total number of patients	37	13	7	1	2	1	2

I Patient Admitted...

- 59 year old on rivaroxaban for paroxysmal AF. Background of radiotherapy for prostate cancer, CISC.
- Received 300U of Botox, 20 injection sites.
- Resolved spontaneously and did not require intervention. Discharged after overnight observation.
- Previously had sessions of intravesical Botox injections on anticoagulation without significant post-operative bleeding.

Conclusions

- Continuation of AC/AP therapy during intravesical Botox injection treatment appears to be safe –0.88% rate of spontaneously resolving haematuria.
- Recommend POC INR test in warfarinised patients prior to procedure to ensure INR not >3 (Higher INR values not evaluated in this study)
- BOTOX increasingly accepted as an outpatient procedure information of safety in this patient group thus important.
- Continuation of AC/AP avoids the added risk of thromboembolic events in these patients following cessation.
- Further work looking at larger patient numbers ideally in a prospective study would be useful in providing a higher level of evidence.

ACKNOWLEDGEMENTS

Special thanks to female and functional urology teams at Epsom, UCLH and St George's Hospital, London

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