

Efficacy of Antibiotic Prophylaxis in Botox Injections into the Bladder Wall Under LA: A Comparison of a Single Dose of Ciprofloxacin vs. a Full Course of Trimethoprim

Background

Over Active bladder (OAB) is one of the urological problems that can affect the quality of life (QoL).

Where mediations fail to treat OAB caused by Idiopathic Detrusor overactivity (DO), A proven intervention to improve the QoL is Botox injection to bladder wall. However, Botox injection as an interventional procedure carries a risk of urinary tract infection (UTIs). Antibiotic prophylaxis strategies vary, and there is limited direct comparison between different regimens.

This study aimed to evaluate the efficacy of two commonly used antibiotics: a single dose of Ciprofloxacin (500 mg) versus a 5-day course of Trimethoprim.

Authors	No / UTI	Abx	Conclusion
Eckhardt S (2021)	565 (30%)	IM Ceftriaxone / ciprofloxacin/ control	No difference in 3/12
Houman J (2018)	284 (28%)	IM Ceftriaxone/ Cipro 3 days	Sig lower rate in <u>Fluroquinolon</u> group
Bichhaus J (2020)	111 (30%)	Cipro pre and post procedure 1 day	Pre procedure better, recommendation – 4 days.
<u>Paradella</u> AC (2016)	616 (1.8%) – SCI	1 Vs 3 days	Higher in 3 days

Methods

The Study included a cohort of 96 patients underwent Bladder wall Botox injection between October 2022 and April 2023 with a follow-up for 2 weeks post-procedure

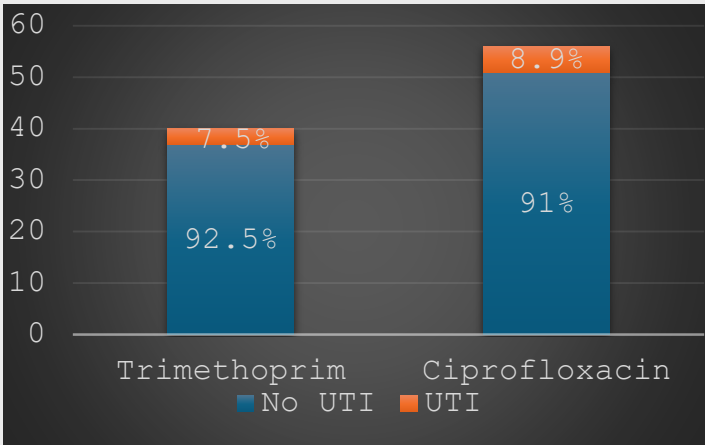
- . The patients were divided into two groups:
 - Group A: 56 patients received single-dose Ciprofloxacin (500 mg) post procedure
 - Group B: 40 patients received a 5-day course of Trimethoprim post procedure

Results

The study showed a Comparable efficacy between Ciprofloxacin single dose and Trimethoprim full course. UTI incidence was similar across both antibiotic regimens.

The Potential benefits of using Ciprofloxacin were; It was a Single-dose therapy that may offer convenience, better compliance, and reduced antibiotic exposure.

As well, A single-dose Ciprofloxacin could be a cost-effective and equally effective prophylactic alternative to a longer Trimethoprim course.



Conclusion

A single dose of Ciprofloxacin (500 mg) administered immediately post-procedure provides comparable prophylactic efficacy to a 5-day course of Trimethoprim. Neither regimen showed superiority, making Ciprofloxacin a viable alternative in appropriate patients.