# Impact of Tamsulosin on Urinary Retention in Patients with Neuromuscular Scoliosis

Georges Abdelahad, Alejandro Marquez-Lara, MD, Kathleen Marsh, Alexander Jinnah, MD, John Frino, MD

#### INTRODUCTION

The purpose of this study is to investigate the prophylactic effect of tamsulosin (FLOMAX®) on post-operative urinary retention (POUR) after posterior spinal fusion (PSF) in neuromuscular scoliosis (NMS) patients. It is hypothesized that the use of tamsulosin (FLOMAX®) will be associated with a lower rate of POUR in this complex patient population.

### **METHODS**

The electronic medical records of all patients underwent PSF for management who NMS between 2015-2019 Of were retrospectively reviewed. Patients were stratified based on whether they were given tamsulosin (FLOMAX®) no later than postoperative day 1 or not. POUR was classified as any patient required who а temporary or permanent catheter reinserted.





#### RESULTS

There were 18 patients (40.9%) who received tamsulosin (FLOMAX®) and 26 patients (59.1%) who did not. None of the patients who received tamsulosin (FLOMAX<sup>®</sup>) experienced POUR compared to 11.5% of patients who did not receive tamsulosin (FLOMAX<sup>®</sup>). Tamsulosin (FLOMAX<sup>®</sup>) administration was associated on average with a one-day reduction in hospitalization, but this failed to reach statistical significance.

### DISCUSSION

This analysis demonstrated that POUR following PSF for NMS is rare regardless of tamsulosin (FLOMAX®) administration. The shorter length of stay in patients who received tamsulosin (FLOMAX®) warrants further investigation but optimizing recovery and discharge after PSF can play a major role in reducing hospital resource utilization.

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