Prophylactic Prevention? Impact of Tamsulosin on Urinary Retention and Length of Stay Following Posterior Spinal Fusion for Adolescent Idiopathic Scoliosis

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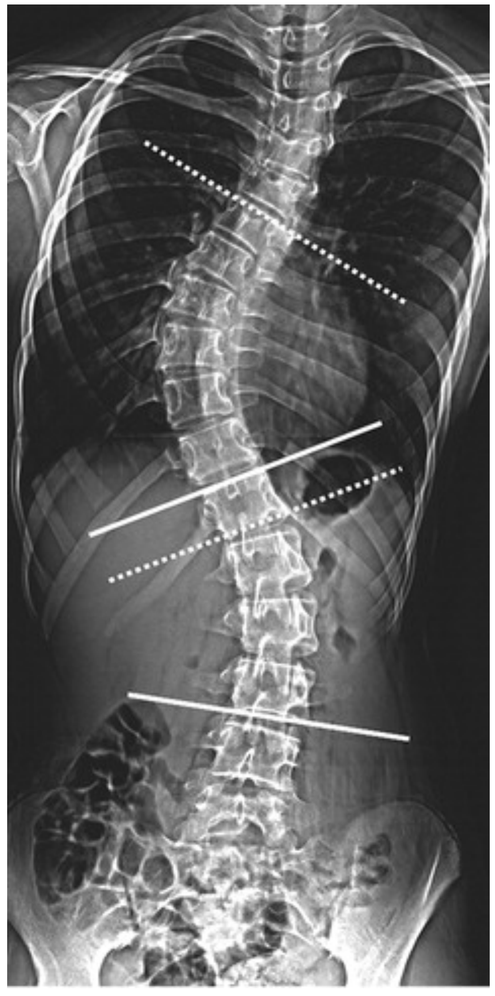
INTRODUCTION

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) for the management of adolescent idiopathic scoliosis (AIS). It is hypothesized that the use of tamsulosin (FLOMAX®) will be associated with a lower rate of UR.

METHODS

The electronic medical records of all patients who underwent PSF for management of AIS between 2015-2019 were retrospectively reviewed. Patients were stratified based on whether they were given tamsulosin (FLOMAX®) as part of an enhanced care pathway protocol and matched with patients who did not receive tamsulosin (FLOMAX®). POUR was classified as any patient who required a catheter reinserted.



RESULTS

Of the 183 patients who met inclusion criteria for analysis, there were 74 patients (40.4%) who received tamsulosin (FLOMAX®) and 109 patients (59.6%) who did not. In patients who received tamsulosin (FLOMAX®), 2 (2.7%) had urinary retention compared to 4 (3.7%) of those who did not receive tamsulosin (FLOMAX®), however not statistically significant. Also, patients who received tamsulosin (FLOMAX®) had a significantly shorter hospitalization by almost one day.

DISCUSSION

This analysis demonstrated that POUR, although rare can have a profound effect on hospital length of stay following PSF. Tamsulosin (FLOMAX®) had no significant difference on the rate of UR after PSF in AIS patients, however its use was associated with a shorter hospitalization. Future large scale clinical trials may help better characterize the prevalence of UR following PSF for AIS and its impact on hospital resource utilization.