



# A Measure of Success: Do Patients Discontinue Overactive Bladder Medications After Sacral Neuromodulation?



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## INTRODUCTION

Overactive bladder medications (OABM) are often discontinued due to poor tolerability or lack of efficacy.

Recent data shows that long-term usage of anticholinergic (AC) OABM is associated with detrimental dose-dependent cognitive effects.<sup>[1]</sup>

Use of 3<sup>rd</sup>-line therapy, including sacral neuromodulation (SNM), can mitigate these potential side effects, however, a subset of patients continue OABM while on 3<sup>rd</sup>-line therapy.

We reviewed records of OAB patients to assess the usage of concurrent OABM in patients who have undergone SNM.

## METHODS

EMR query for all patients who underwent SNM from August 2014 to June 2016.

Patients with urinary retention or if underwent SNM removal were excluded.

Concurrent therapy was defined as filling an OABM prescription for  $\geq 11$  consecutive months at 1 year following SNM surgery.

Review of clinical characteristics, urodynamic parameters, filled OABM by an external prescription database, Patient Global Impression of Improvement (PGI-I) and patient-perceived % improvement was performed.

### REFERENCES:

1. Risacher, S.L., et al., Association Between Anticholinergic Medication Use and Cognition, Brain Metabolism, and Brain Atrophy in Cognitively Normal Older Adults. JAMA Neurol, 2016. 73(6): p. 721-32.

## RESULTS

	Concurrent	SNM alone	p-value (95% CI)
<i>n</i>	10	64	
Age at SNM surgery, mean (SD)	74.5 (7.2)	64.9 (15.8)	0.004 (3.9,10.1)
Male, n (%)	2 (20.0)	5 (7.8)	0.238
BMI, mean (SD)	28.9 (4.3)	30.3 (8.1)	0.425 (2.0,5.2)
Revision, n (%)	1 (10.0)	7 (10.9)	0.999
<i>UDS, n</i>	<i>n=8</i>	<i>n=50</i>	
Capacity, mean (SD)	328.9 (117.1)	316.9 (128.9)	0.797
DO present, n (%)	6 (75.0)	24 (48.0)	0.300
<b>Post-operative Data, n</b>	<i>n=5</i>	<i>n=38</i>	
Follow up, months, median (range)	15.0 (12-25)	13.5 (2-30)	
PGI-I, mean (SD)	2.4 (1.3)	2.42 (1.5)	0.729
Patient-perceived % improvement, mean (SD)	42.0 (45.5)	40.8 (52.9)	0.777

Table 1: Demographic and clinical factors as well as outcomes for SNM patients.

## CONCLUSIONS

>85% of patients who progressed to SNM discontinued OABM and utilized SNM as their sole treatment modality, while a smaller portion of patients (13.5%) concurrently used OABM following SNM for  $\geq 1$  year.

Symptom improvement and patient satisfaction were equivalent between groups.

SNM presents as an opportunity to provide patients with a successful outcome while avoiding the cumulative cognitive decline associated with AC medications.

Role for counseling and educating older patients to discontinue OABM after SNM surgery