

## GENDER DIFFERENCES IN USE OF SACRAL NEUROMODULATION THERAPY IN A NATIONAL DATABASE

### Hypothesis / aims of study

Analyze use of sacral neuromodulation therapy (SNM) by diagnosis and by gender and to identify whether there are gender differences in use at a population level

### Study design, materials and methods

Thomson Reuters MarketScan Commercial Claims and Encounters dataset, the largest database of commercially insured population in US was used for analysis. The study cohort comprised of patients  $\geq 18$  years with diagnosis of Urinary incontinence, urinary retention and fecal incontinence. Subjects were identified by use of ICD -9 codes for diagnosis. Subjects attempting sacral neuromodulation therapy were identified by CPT procedure codes. SAS statistical software was used for data analysis.

### Results

Results: The study period was from 2001 to 2010. Among 512,311 subjects with diagnosis of urinary retention, 214,584 (41.89%) were women. Total 1284 attempted SNM therapy and 645 (50.23%) received the implant. 80% of them were women. 82 received a second implant and 87.8% of them were women.

Among 3.42M subjects with urinary incontinence, 66.99% were women. Total 6,521 attempted interstim therapy and 4,200 (64.4%) were inserted with the device. 89.05% insertions in this category were in women. 436 received a second implant and 90.6% were women.

Numbers for fecal incontinence were smaller (62380) as it is a more recent indication for interstim. Only 35 (0.06%) interstims were attempted for this indication and only one of them was in men. About half of those tested received the device (45.71%)

### Interpretation of results

Thomson Reuters database collects information on healthcare claims from providers and facilities to include in-patient, outpatient, emergency room visits and drug claims. It is a robust database to study practice patterns of surgical procedures, device use and cost information. Sacral neuromodulation therapy is a relatively newer treatment for lower urinary dysfunction. Among the two most common indications for therapy urinary retention is more common in men while urinary incontinence is more common in women. This study looks at use of sacral neuromodulation in subjects 18-65 years of age. In this relatively younger population SNM seems to be more commonly used in women irrespective of underlying diagnosis. It is not clear whether women have more severe symptoms and therefore receive the treatment more often or there is unintentional hidden bias in offering this treatment.

### Concluding message

There are significant gender disparities in use of sacral neuromodulation therapy. Women appear to receive Sacral neuromodulation therapy disproportionately more commonly for both the indications of urinary retention and for the indication of refractory urgency incontinence.

### References

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### Disclosures

**Funding:** Institutional funds **Clinical Trial:** No **Subjects:** NONE