636. Sacral Neuromodulation. Is there a difference in the number of follow-up visits required by patients following treatment with Axonics or Medtronic SNM devices?

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Hypothesis / aims of study

- Sacral neuromodulation (SNM) is an effective therapy for refractory lower urinary tract dysfunction (LUTD).
- With the recent emergence of novel SNM systems, understanding the differences in post-implantation care, particularly hospital follow-up visits, is crucial for optimizing patient management.
- Whilst there is no apparent difference in the surgical technique or patient outcomes for the two most widely used SNM technologies in the U.K., a notable difference exists in the number of at-home programs available to patients (Axonics = 2 programs; Medtronic >7 programs).
- The aim of this study was to identify whether this difference in programming influenced the frequency of follow-up appointments, which impose a significant time and economic burden to both the patient and the hospital.

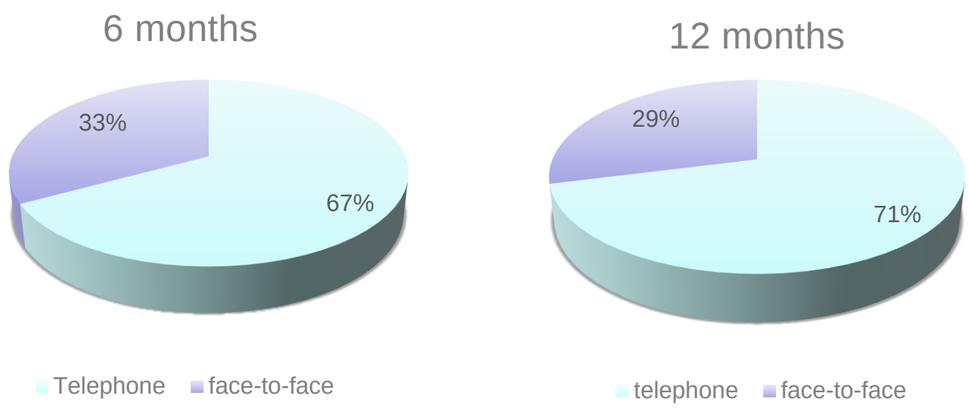
Study design, materials and methods

- A retrospective analysis was conducted on electronic medical records of patients who received SNM implants using either Axonics (Group A) or Medtronic (Group B) devices between 01/01/2019-31/12/2022.
- A total of 32 patients were included in the study.
- Group A: Axonics device (n=16). Group B: Medtronic (n=16). Patients in each group were matched for:
  - Age (median 39.5 years R:21-76 vs 40.5 years R:25-68),
  - Gender: 14 female and 2 male patients in each group.
  - Lower urinary tract symptom (LUTS): 8 voiding; 8 storage in each group.
- Data on hospital follow-up visits, including frequency and clinical outcomes, were collected and analysed.
- Patients completed ICIQ-OAB (n=14), USP (n=8), LARS(n=11), EQ5d (n=16) and SF-Qualiveen (n=5) questionnaires.
- All patients had a Urodynamic study and MRI imaging ruling out spinal cord abnormalities.
- SNS response was also measured intraoperatively (anal bellow / toe extension)(n=29) and included in our analysis.
- Parametric and non-parametric tests were used to investigate the association of independent variables with the number of patient visits at 6 and 12 months. Comparison between the 2 groups was also performed.
- Follow up appointment were performed both as face-to-face consultations and telephone appointments

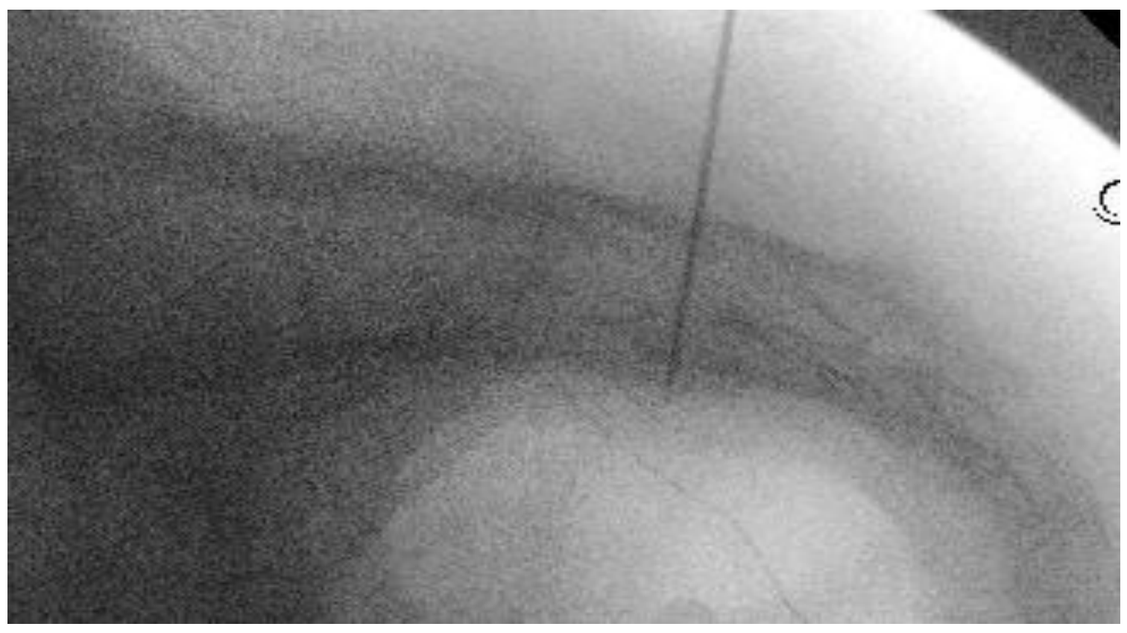
Median (min-max)	Group A	Group B	P value
Voided volume (mL)	193 (8-528)	134(32-827)	0.289
Qmax (mL/s)	23(6-43)	16(56-42)	0.161
PVR (mL)	78(0-259)	50(0-435)	0.725
Pdet@Qmax (cmH_2O)	23.5(11-85)	30(20-44)	0.426

Results and interpretation

- The median number of follow-up appointments at 6 and 12 months was 2(p:0.969) and 3, for both groups (p:0.878)
- There was also no difference between telephone and face-to-face appointments.



- The number of follow up visits were not related to the type of LUTS, device used, neurological symptoms, imaging results, smoking, alcohol consumption, diabetes mellitus, hypertension, previous surgery and urodynamics.
- Patients with high SF-Qualiveen fear subscore related to increased number of visits (p=0.040,rho=0.895).
- USP, EQ-5D and ICIQ-OAB sub scores did not show any significant correlation.



Conclusions

- Our findings suggest that there was no difference in the number of follow up appointments that patients required after implantation with either of the two Sacral Neuromodulation systems implanted. This data will help patients when making device choices.
- The limitations of this study are the relatively short follow-up (the Axonics device has been available in the UK since 2017). Further studies are warranted to understand the differences in post-implantation care, in the longer term, between these devices and will help establish the cost-effectiveness of Axonics versus Medtronic SNM systems. This is essential for optimising patient management and healthcare resource allocation in SNM therapy for LUTD.

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