

Tilmelding af Foredrag

Foredragets titel

Transoral Robotic base of tongue reduction in patients with obstructive sleep apnea – a cohort study – preliminary results

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Introduktion

Obstructive sleep apnea (OSA) is characterized by a collapse of the upper airways during sleep, sometimes due to enlarged lingual tonsil tissue. With the establishment of the Center of Severe Snoring and Sleep Apnea, Regional Hospital Gødstrup, surgical treatment of OSA was introduced as a supplement to already established treatments such as Continuous Positive Airway Pressure (CPAP). We present the first cohort of patients with OSA surgically treated at Regional Hospital Gødstrup with transoral robotic surgery (TORS) due to the collapse of the base of the tongue (BOT).

Materiale/metode

Adults were referred due to OSA or severe snoring and either refusal to use CPAP or CPAP compliance issues. Patients were included if drug-induced sedation endoscopy showed partial or total collapse at BOT or epiglottis. Type 3 home sleep registration was performed before and after surgery (CRM). Epworth Sleepiness Scale (ESS) and Sinonasal Outcome Test (SNOT22) were registered before and after surgery. Single-level surgery (TORS-BOT) and multilevel surgery such as barbed reposition pharyngoplasty including tonsillectomy, anterior pharyngoplasty, radiofrequency ablation of velum, partial epiglottis resection or a combination of these in addition to TORS-BOT were performed. The authors performed the surgery.

Resultater

Twenty-one consecutive patients operated between 27th. of April 2022 – 10th. of May 2023 were registered. Nine patients underwent single-level surgery, and 12 patients underwent multilevel surgery. Nineteen patients completed post-op CRM, 9 in the single-level group and 10 in the multilevel group. The median follow-up time was 105 days (range 27 – 344 days). In total, the median pre-op AHI was 21 (95%CI 18.7; 34.6) and the median post-op AHI was 11.4 (95%CI 10.5; 18.2) and this was found to be statistically significant. In the single-level group, the median pre-op AHI was 21.0 (95%CI 14.2; 40.2) and the median post-op AHI was 10.2 (95%CI 6.1; 17.4), and in the multilevel group median pre-op AHI was 23.9 (95%CI 14.1; 38.2) and post-op AHI was 14.8 (95%CI 11.0; 22.4) and changes were found to be statistically significant. Fourteen patients completed post-op questionnaires. Median pre-op ESS was 9 (95%CI 7.5; 11.6) and median post-op ESS was 6 (95%CI 3.8; 9.0) while median pre-op SNOT22 was 34.5 (95%CI 28.9; 51.9) and post-op SNOT22 was 22.5 (95%CI 19.3; 34.9) and both were statistically significant. No severe long-lasting complications such as dysgeusia, dysphagia, or insufficient velopharyngeal closure were reported.

Diskussion

Although the results are preliminary, data suggests that transoral robotic reduction of the base of the tongue in

selected patients with obstructive sleep apnea is a viable and secure surgical treatment as either single-level or multilevel surgery with solid results. However, postoperative data suggest a mismatch between patient self-reported outcomes and type 3 sleep registration outcomes. Further studies are needed to attempt to determine predictors for surgical success in patients with complex obstructive sleep apnea undergoing surgery.

Unavngivet

- Ønsker kun præsentation af poster

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