Mapping quality of life after balloon dilatation in subglottic stenosis using Dyspnea index and Short Form Health Survey -36

Anders Erlandsson^{1,2}, Anders Lundqvist¹ ¹ Umeå universitet, ² Region Västerbotten

Background

An accurate diagnosis and proper treatment plan are required to restore an adequate patent airway in fibrotic subglottic stenosis (SGS). Currently the definitive treatment entails single-stage balloon dilatation with steroid injections. The primary aim was to evaluate successful airway restoration and general quality of life in cases with SGS in northern Sweden using robust patient reported outcomes.

Methods

All participants with need of surgical treatment due to SGS that had been referred to the department of otorhinolaryngology, University Hospital of Umeå from September 2020 to August 2023. Exclusion criteria included malignant, extrathoracic or cartilaginous cause, age < 18 years, or incompetent to sign consent documents. We assessed the patient-reported outcome measures pre- as well as 3 months postoperatively.

Results

Of the 40 cases fulfilling the eligibility criteria's, 33 cases completed the Dyspnea index (DI) and the short form health survey (SF-36) pre- as well as 3 months post-operatively. Receiver operating characteristics showed significant improvement in DI as well as in SF 36 scores post-operatively.

Conclusion

Evaluation of balloon dilatation in SGS in this cohort follow-up analysis shows clear improvement in patient quality of life using robust PROM 3 months postoperatively, ensuring the use of a safe and well tolerated procedure.