

**Background:** Subglottic stenosis is a well-known potentially life-threatening presentation of granulomatosis with polyangiitis (GPA). Circumferential scarring and critical narrowing of the airway at the level of cricoid cartilage and/or upper tracheal rings appears in 10–16% of patients with GPA. Symptoms range from cough and shortness of breath to life-threatening dyspnoea with stridor. Majority of patients need tracheostomy at the moment of diagnosis. Surgical treatment consists of endoscopic surgery, complex resection of the stenotic segment followed by reconstruction and stenting. Surgical therapy usually has to be repeated due to restenosis of the airway despite ongoing medical treatment. Endoscopic balloon dilatation is a procedure of choice in our institution in a long term management of those patients with good postoperative results. We present four patients with a long history of GPA complicated by airway obstruction and their management.

**Methods:** Retrospective chart review of four patients with a long history of GPA and airway obstruction treated in our institution.

**Results:** All four patients present with a complex history of airway obstruction. All of them have had a tracheostomy tube for a period of time or long term, and one of the patients have had a laryngotracheal reconstruction. Endoscopic balloon dilatation has been carried out as an elective procedure in the management of GPA related subglottic stenosis for two main indications, voice improvement in long term tracheostomy patients and airway obstruction in non-tracheostomy patients.

**Conclusions:** Elective endoscopic balloon dilatation is an optimal procedure in long term management of subglottic stenosis related to GPA.

**Keywords:** Subglottic stenosis; granulomatosis with polyangiitis (GPA); dilatation

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**Footnote**

**Conflicts of Interest:** All authors have completed the ICMJE uniform disclosure form (available at http://dx.doi.org/10.21037/map-21-ab124). The authors have no conflicts of interest to declare.

**Ethical Statement:** The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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