What five things have we learned about airway stenosis and its treatment during 2020?

What we learned		What this means
1. How COVID-19 (coronavirus disease 2019) impacts patients with idiopathic subglottic stenosis  **Reading**: Anderson C, Sandhu G, Yaghchi CA. **Impact of the COVID-19 Pandemic on Patients with Idiopathic Subglottic Stenosis**. Ear, Nose & Throat Journal. December 2020. doi:10.1177/0145561320977467	As a subglottic stenosis patient, you are at no greater risk than average the average person of contracting and getting sick from C19, unless: • **Your airway is already narrow** • **You are taking immune suppressant medication** • You are classified as obese (BMI of 30+) • You have other illnesses (co-morbidities) that place you at high risk	**Do not delay having your next injection or dilation surgery if your breathing is declining.** Follow the precautions recommended by your government's health department – wear a mask when in crowded places, wash your hands frequently, carry and use hand sanitizer where hand washing is not possible, practice physical distancing in situations where you may catch C19. If you catch the virus, monitor your symptoms. If you are concerned, advise your airway doctor of your situation for more specific advice.

What we learned		What this means
2. Peak Expiratory Flow (PEF/Peak Flow) is important to measure to monitor your airway health  **Reading**: Song SA, Santeerapharp A, Choksawad K, Franco RA Jr. **Reliability of peak expiratory flow percentage compared to endoscopic grading in subglottic stenosis.** Laryngoscope Investigative Otolaryngology. 2020;1–7. https://doi.org/10.1002/lio2.492 Sungjin A. Song, MD ; Guri Sandhu, MD; Ramon A. Franco Jr, MD **Should We Routinely Use Pulmonary Function Testing in the Management of Subglottic Stenosis?** Laryngoscope. 2020; https://doi.org/10.1002/lary.28678	It's an excellent method of monitoring your airway health without the need to be scoped in your doctor's office. Not only is it easy and affordable, but it provides factual evidence of how quickly your airway narrows, and with regular recording allows you to provide visual evidence to support a remedying injection or dilation surgery.	Purchase a Peak Flow Meter online and start measuring. Record your number in an app, spreadsheet or just a notepad if that is easiest for you. There's a spreadsheet template available on the group, and the latest Rough Guide gives details of apps you can use. **Make it your new habit for 2021!**

What five things have we learned about airway stenosis and its treatment during 2020?

What we learned		What this means
3. How doctors can execute the Endoscopic Wedge Excisions Technique  **Reading:** Dale C. Ekbom; Semirra L. Bayan; Andrew J. Goates; Jan L. Kasperbauer, **Endoscopic Wedge Excisions with CO2 Laser for Subglottic Stenosis** Laryngoscope, 00:1–5, 2020: https://doi.org/10.1002/lary.29013 Gelbard A, Anderson C, Berry LD, et al. **Comparative Treatment Outcomes for Patients with Idiopathic Subglottic Stenosis.** *JAMA Otolaryngology Head Neck Surg.* 2020;146(1):20–29. https://doi.org/10.1001/jamaoto.2019.3022	Last year we heard that the surgery which had the most successful outcome for patients (longevity of surgery free time PLUS minimal impact on voice) was the endoscopic wedge technique. Similar to a dilation, it is done down the throat, so no cutting open the neck or removing segments like in a resection, but research has found it lasts a lot longer than a dilation. Initially the operation was only done at Mayo Clinic in Rochester. This year, the technique was shared so it can be adopted more widely	Talk to your doctor about this technique as an alternative to traditional dilations – feel free to share the paper with them. Chat to other patients who have had this procedure in the group if you have questions.

What we learned		What this means
4. Steroid injections have a significant impact on surgery-free intervals  **Reading:** Debbie R. Pan; David E. Rosow, **Office-Based Corticosteroid Injections as Adjuvant Therapy for Subglottic Stenosis** Laryngoscope Investig Otolaryngol. 2019 Aug; 4(4): 414–419. https://doi.org/10.1002/lio2.284	Steroid injections have been used for airway stenosis for around a decade but have really taken off over the last five years. More and more papers and studies are being conducted to understand what works. In group discussions, we also lean that different doctors use different techniques (such as externally vs internally injected) and quantities of steroid injected. Anecdotally, 80mg of steroid appears to have the most positive result.	If you have not yet tried steroid injections, talk to your doctor about trying these. If you have tried injections and they have not worked, then talk to your doctor about potentially applying a different technique (externally for example) or injecting more of the steroid (80mg rather than 40mg for example).

What five things have we learned about airway stenosis and its treatment during 2020?

What we learned		What this means
5. Your BMI has an impact on the frequency you need dilations  **Reading:** Deanna C. Menapace, Dale C. Ekbom, David P. Larson, Ian J. Lalich, Eric S. Edell, and Jan L. Kasperbauer **Evaluating the Association of Clinical Factors With Symptomatic Recurrence of Idiopathic Subglottic Stenosis** JAMA Otolaryngol Head Neck Surg. 2019 Jun; 145(6): 524–529 https://doi.org/10.1001/jamaoto.2019.0707	Research has found that one in three (34%) of us is in the obese category when it comes to weight. This research from Mayo Clinic has also found that iSGS patients with obesity (particularly with a BMI of between 30.0 and 34.9 - our research suggests 18% of us sit in this category) are likely to see their stenosis reoccur much faster after a dilation than those patients of healthy weight or underweight.	This may be another good reason to consider reducing your BMI during 2021. In addition to increasing your surgery frequency, having a BMI over 30 increases your risks under anaesthesia and during surgeries, particularly when coupled with sleep apnoea. It also increases risk of complication should you contract COVID-19.