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Blocked noses

This issue of our Journal contains interesting papers about blocked noses [1-4]. Nasal obstruction is one of the most common reasons that patients visit their doctors, general practitioners and otorhinolaryngologists alike and has a significant impact on the quality of life of patients [5, 6]. Blockage is an important outcome of disease not only in nasal disease [7-9], but also in rhinosinusitis [10].

It has been clearly shown that symptoms and objective measurements do not always correlate well [11-13] and the assessment of a patient suffering of nasal obstruction should be based upon both subjective and objective measures [14]. Peak nasal inspiratory flow (PNIF), acoustic rhinometry (AR) and rhinomanometry (RM), assess different aspects of nasal obstruction but correlate generally with each other and can be all be used in research and in clinical practice [14-16]. It has been suggested that the sensation of nasal airflow is derived from a cooling of the nasal lining on inspiration, and this is probably detected by cold thermoreceptors in the mucosa [17]. In this issue of the Journal, Lindemann et al. investigated the influence of skin cooling on the nose. Nasal mucosal temperature, humidity of inhaled air, and volume of the anterior nose increased after application of a cold face mask. Apparently, the nose is able to guarantee sufficient steady intranasal nasal air conditioning by increasing mucosal temperatures as well as changes in nasal geometries by a trigeminal nerve mediated response [3].

The discrepancy of subjective measurements might be caused by the feeling of sensation of obstruction in other areas of the nose and sinus like the middle meatus or the ethmoid [18]; another explanation could be that properly validated questionnaires to measure nasal obstruction are scarce [19]. In this issue of the Journal, van Egmond and colleagues evaluated the clinimetric properties of four frequently used measurement instruments, the Glasgow Health Status Inventory (GHSI) and the Glasgow Benefit Inventory (GBI), Peak Nasal Inspiratory Flow(PNIF) and 4-Phase Rhinomanometry (4PR) [1]. All instruments demonstrated adequate content validity, inter-, and intra-rater reliability. Analyses of construct validity yielded again low correlations between the subjective and objective outcomes [1]. Another disease that contributes to a significant workload for otolaryngologists and can lead to significant morbidity and rarely mortality is epistaxis. In this issue, Allison et al. suggest and validate a predictive scoring tool (RHINO-ooze score) with to identify patients with epistaxis at high risk readmission and to enable risk stratification for possible definitive intervention [4]. The RHINO-ooze scoring tool demonstrated a good specificity and sensitivity in predicting the risk of 30 day readmission in patients with epistaxis and can be used as an adjunct to clinical decision making with regards to timing of operative intervention in order to reduce readmission rates. This is a really important tool that can be used in daily practice in our clinics. I would be interested to have another group reporting in our Journal on the validity in their practice. In some patients, the risk of readmission is very high: the patients with Hereditary haemorrhagic telangiectasia (HHT) [20]. The management of epistaxis in HHT primarily aims to reduce the frequency and severity of the bleeding by a variety of strategies such as coagulating laser e.g. argon or KTP, septodermoplasty, hormone manipulation e.g. tamoxifen, clotting manipulation e.g. tranexamic acid and more recently vascular formation manipulation e.g. bevacizumab. However, in some of these patients the epistaxes are life-threatening and it is for this group of patients that nasal closure can be an option. Prof. Lund, our former editor-in-chief, reports here her enormous series of 100 HHT patients that had a nasal closure [2]. Overall, most patients derived significant benefit from the procedure with complete cessation of nasal bleeding in 94%, a highly significant improvement in the epistaxis score and their quality of life measured with the Glasgow Benefit Inventory (GBI) score [2]. The permanent prevention of airflow is associated with complete or near-total cessation of epistaxis in the majority of patients. In these patients, a blocked nose is a spot of bother.

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