Patient-centered treatment goals

We often explain to patients that we do not operate CT scans or MRI's but patients with symptomatic disease [1-3]. But, how clear are we in discussing the aims of our treatment with our patients? How often is our surgical goal to remove the polyps or open up the sinus, which we may judge to be useful for the patient's disease without directly improving the primary symptom of the patient, and does the patient understand our goal? Are we always sure that our aim is the same as the wishes of our patients? Are we sure that we explain our CRS patient that he/she has an inflammatory disease that most likely will need long term medical treatment also after surgery?

A first but very important step in counseling our patients is to realize which symptoms can be attributed to the objective signs of disease. In this issue of the journal, Eweiss et al. [4] show that facial pain in patients with polyps is uncommon and associated with viscid secretions within their sinuses. Recently, Dietz de Loos et al. [5] showed in his series that although there were significant differences in scores on several symptoms, there was considerable overlap of many symptoms, and it remains difficult to distinguish between CRSwNP and CRSsNP based on clinical impression alone. For example, headache and facial pain was reported by 42%/48%, respectively, in the CRSwNP patients and 58%/61% in the CRSsNP patients. However, both the headache and the facial pain were significantly more severe in patients with CRSsNP than CRSwNP and both these symptoms were independent risk factors for CRSsNP. Because his study was done in a university referral centre, it might be that more patients with CRSwNP than in general hospitals actually had viscid secretions within their sinus. However, also others have shown that the symptomatology between these two entities of the disease shows a significant overlap [6-8]. Ron Eccles, in his great review on the mechanisms of the symptoms of rhinosinusitis, also indicated that the mechanisms of facial pain, headache or sinus pain associated with chronic rhinosinusitis are poorly understood and much of the pain may have similarities to tension-type headache [9]. The importance of differentiating tension-type headache and atypical midfacial pain from sinus related facial pain has been highlighted in a number of papers in recent years [10-12]. This becomes even more important now the recognition of chronic tension-type facial pain/ atypical midfacial pain has lead to specific treatment with low dose Amitryptiline that recently in a placebo controlled trial has been proven to be effective [13]. The same group in this issue of the journal shows an enhancement of the effect of low dose Amitriptyline by the addition of pindolol, a serotonin receptor agonist. Sometimes it remains a challenge to ensure that the facial pain/headache is really caused by the sinus disease. In doubt it might be worthwhile to try medication first [14].

For other symptoms of CRS it can also be a challenge to improve symptoms with surgery and these doubts have to be discussed with the patient. Loss of smell is one of the symptoms that can be difficult to treat [15,16] and we have to warn the patient that it is not (only) the blockage of the polyps [17], but that the inflammation causes the reduction in smell [18] and severity of disease is related to amount of smell reduction [19]. We are all aware of the significant impact of systemic corticosteroids on sense of smell even when we hardly see any change in the polyp seize [20-22]. On the other hand, sinus surgery has been shown to have a long term positive effect on smell in most patients too [23-26]. The patient has to be informed of the chances of improved sense of smell after sinus surgery and the importance of using local medication afterwards. Last but definitely not least, sometimes the role of surgery is not primarily to improve the symptoms of the upper airways but also to improve lower airway disease [25]. Nasal polyps are found in 30-40% of cystic fibrosis (CF) patients [27]. The reports on the effect of sinus surgery on upper and lower airway function in patients with CF are inconsistent.
The most consistent findings are that ESS in patients with CF produces symptomatic benefit. However, there are more conflicting results with regards to endoscopy scores, days spent in hospital, courses of intravenous antibiotics, and improvement of pulmonary function [28]. Chronic, pulmonary infections remain the single most prominent cause of the increased morbidity and mortality in CF [29]. In this issue of the journal, Kasper Aanaes and his colleagues [30] give clear indication that combined sinus surgery and postoperative systemic and topical antibiotic treatment significantly reduces the frequency of pulmonary samples positive for CF pathogens in the first year after sinus surgery. Although this is not a randomized trial, it changed my thinking on the potential effects of sinus surgery in CF. Not only do I counsel these patients on potential positive effects on their symptoms, but also indicate that surgery and aggressive local antibiotic treatment of their sinus might improve their lower pulmonary morbidity and mortality.

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