Rhinology, 48, 257-258, 2010

Recalcitrant Rhinosinusitis, the diagnosis and treatment and evaluation of results

Chronic Rhinosinusitis can be a debilitating disease. Since ancient times people are aware of this disease and potential treatments and in this issue of our Journal, Prokopakis et al. give us an entertaining review about the knowledge of CRS from Hippocrates and the Hellenistic period to modern times [(1)]. In most patients rinsing with NaCl, and medical treatment, like local corticosteroids and if necessary (long term) antibiotics is an effective treatment [(2)]. In a subpopulation, this medical treatment is insufficient and FESS is necessary. In most studies, FESS has been reported to be effective in over 80% of the cases. However, in a small group of patients even the combination of medical and surgical treatment fails, the disease of these patients is often termed recalcitrant rhinosinusitis. In this issue of the Journal, several studies appear that deal with recalcitrant rhinosinusitis. Ragab and colleagues [(3)] report on the impact of quality of life (QOL) in a previously reported trial in which surgical and medical treatment is compared. In this study, they show that apart from the earlier similar effects on symptoms in recalcitrant CRS also QOL is equally positively influenced by medical and surgical treatment in this group. Also Olsson et al. [(4)] show the positive effects of FESS on QOL of life in patients with CRS with nasal polyps and asthma and very interestingly show additional effects of nasal corticosteroid use post surgery on SF-36 in this group already five weeks after surgery. It is important to measure relevant patient rated outcome measures (PROMs) to supplement clinical measures of disease to assess how disease and medical intervention impacts on quality of life. It remains relevant to make a difference between general QOL questionnaires and disease specific QOL questionnaires and to realize that the validation of QOL questionnaires is an important prerequisite to use these questionnaires to study disease and treatment effects [(5,6)]. Along with well-known patient reported outcomes such as health-related quality of life and current health state, patient satisfaction can provide an ultimate end point to health care quality. In the coming years in the Rhinology field, these PROM's will become an essential part of quality assessment.

Elmorsy and colleagues look at the efficacy of macrolides treatment in a subgroup of patients with allergic fungal rhinosinusitis (chronic rhinosinusitis with positive fungal culture and positive allergic mucin) and reported a significant reduction in sICAM-1 and IL-8 in sinus aspirates again a support for a role of macrolides now even in allergic fungal rhinosinusitis [(7)]. Hansen shows that it is not only the medication, in this study good old fluticasone propionate, but that also the way it is applied is an important hallmark of treatment success [(8)]. She describes a study with a novel device: the optinose device in a small study in patients with recalcitrant CRS without nasal polyps who did not react sufficiently to normal medical treatment. The results were remarkably good. The same device was also reported to be effective in a study in CRS with nasal polyps published recently in this Journal [(9)]. This device provides significantly larger deposition in the upper posterior segment of the nasal passage, housing the sinus ostia and the olfactory region [(10)]. There are several initiatives to try to reach the mucosa of the middle meatus or even the sinuses with local medication [(11-14)], although unfortunately local treatment, especially local treatment with antibiotics has not been as successful as we have hoped for [(13,14)].

For decades our medical treatment consists of NaCl, (local) corticosteroids and antibiotics. New treatment ideas from as simple as rinsing with hypochloride [(15)] or baby shampoo [(16)] to very elaborate like treatment with anti-IgE [(17,18)], anti-IL5 [(19)] or anti fungus [(20,21)] have not been all successful. In this issue, Pinto et al. report on a small randomized, double-blind, placebo-controlled trial of anti-IgE for chronic rhinosinusitis, again with quite disappointing effects [(18)]. They also report on the difficulties of including patients in this sort of trials and emphasize the need for cooperation between centres. It remains extremely difficult to do medication trials without support from the pharmaceutical industry however the European Rhinologic Society has been quit successful in doing unfunded trials by collaboration of a large number of centres in the recent past. This is in my opinion the way forward to make sure that we are able to do trials that potentially will benefit our patients without being dependent on the pharmaceutical industry. Furthermore, it becomes more and more clear that CRS is a heterogeneous disease and very likely we have to tailor our treatment much more to the specific phenotype of the patient. This however will further increase the need for cooperation to include sufficient numbers. First in this issue but last in this editorial, we find the review of Vats and Birchall [(22)] on the fascinating world of stem cells and regenerative medicine. The first potentials and realities for rhinology are there, for CRS we have to dream a little bit longer.

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