

Rhinology and cognition

This issue of our journal starts with an extremely interesting systematic review on the impact of CRS on cognition (Esther Yanxin Gao this issue) measured with objective global cognitive function tests like the Montreal Cognitive Assessment (MoCA) or Mini-Mental State Examination (MMSE). CRS is found to be associated with 9% poorer global cognitive function, while CRS treatment is associated with 8-9% improvements in processing speed and working memory. One might wonder how to interpret a 9% difference. A reduction of 9% (2.7 points of the 30 max) is well above the minimal clinical important difference of the MoCa (1-2 points). In other words this is a significant decline. The authors discuss various biological mechanisms that may explain the link between CRS and cognitive function with a link between sinonasal inflammation and neural networks and changes in the nasal microbiome that may contribute to chronic systemic inflammation that is associated with neurodegenerative disorders including Alzheimer's disease. Although the fact that various conditions such as natural aging, neurodegenerative diseases, mood disorders, and chronic medical diseases have been reported to be associated with impaired olfactory and/or gustatory function, much less is known about the impact of loss of smell on these diseases although studies have shown the effect of loss of smell on developing a depression^(1,2). But probably more likely is the impact of stress, fatigue, lack of good sleep and emotional state that have been shown to have influence on the results of these tests and are important symptoms of chronic rhinosinusitis^(3,4).

Although we are aware of this association we could be more

focussed on discussing the consequences with our patients and warning them of the impact on their daily functioning.

The good news of this systematic review is the reversibility of cognitive impairment with therapy. CRS treatment was associated with 8-9% improvements in processing speed and working memory. If needed, an extra argument to be precise and effective in the treatment of our patients. Here again further research is needed to determine which of the different factors in the association are most important but we are all aware of course of the impact of treatment on cognitive functioning, sleep, fatigue and work productivity^(5,6).

Next to this interesting systematic review many other issues are discussed. Certainly worth mentioning is the proposal for an informed consent for rhino(septo)plasty by the international faculty of the European Rhinoplasty Course, that might serve rhinoplasty surgeons in the development of their informed consent documents (Hellings et al. this issue). And also on septal surgery: a randomized study showing the benefits of negative pressure drainage over nasal packing after septoplasty (Tu et al., this issue). Something to read and maybe to change in your practice.

Finally an interesting discussion (see letters) on the indication for Draf III versus the Draf IIb based on the systematic review on this subject published earlier this year⁽⁷⁾. That is what the editors of Rhinology love to see, discussions in our Journal to optimize care in the daily practice of our patients.

Please send in more letters, we are happy to receive them!

References

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