## Chronic inflammation and olfaction are still of central interest for rhinologists

A new year has started and although the current issue does not contain any Covid-19 related articles, olfaction together with chronic inflammation remain the major topics. Giving us further insight on risk factors, potential mechanisms, treatments and epidemiology the current volume is full of notable new findings. The absence of any surgical article and the preponderance of contributions on inflammation and olfaction also reflects the evolution in the field of the last years, underlining how strongly rhinology as subspecialty has become an intersection between neuroscience, medical care, pharmacology and physiology <sup>(1)</sup>. Surgery is still a cornerstone activity for most of us, but the narrow view some colleagues (also within ENT) have on rhinology, reducing it to a obstacle fixing surgery discipline are definitively untenable in light of what rhinologists currently communicate scientifically <sup>(2)</sup>.

Besides two systematic reviews and meta-analysis on the efficacy of immunotherapy on local allergic rhinitis and the role of human papilloma virus for recurrence in inverted papilloma, the current issue includes original contributions with remarkable messages.

Epidemiologically interesting is the fact, reported by Jeon et al. that chronic rhinosinusitis seems to be associated with an increased risk of cardiovascular disease. It impressively recalls what's out there for a while, namely that chronic inflammatory states do influence other body sites and are probably not isolated processes <sup>(3)</sup>. Not only internal states, but also what we are exposed to increases the risk of CRS. Besides occupational exposure <sup>(4)</sup>, also leisure activity such as electronic cigarette smoking raises the likelihood of CRS as reported by Rha et al. Taken together, all these cross effects between inflammation, daily activities and general health may lead to a change of how we consider CRS in future. From bed to benchside, three in vitro studies from Lux et al., Lygeros et al. and Zhang et al. complete the current issue with noteworthy outcomes. Concordant with earlier findings <sup>(5)</sup>, the MMP-12 levels may serve as biomarker in CRS with polyps. Therapeutically interesting information is further reported by two other groups that provide evidence for povidone-iodine to be effective against biofilms and confirming the anti-inflammatory effects of locally applied clarythromycin by means of loaded membranes.

In line with previous epidemiological studies that pointed out co-morbidities as factors associated with decreased olfactory function <sup>(6)</sup>, Thorstensen et al. report the particular observational finding that COPD patients perform significantly poorer than controls in olfactory testing. As olfaction has been increasingly studied, reliable assessment has always been a major concern <sup>(7)</sup>. In this issue, Zou et al. provide validation data for a brief version of the questionnaire of olfactory disorders, that should help to sharpen our patients major complaints and improve our therapeutic counseling in this field.

I wish all of you a pleasant reading and a Happy New Year!

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