

## Introduction

In 2010 in Geneva, we contacted some active junior members to start a Junior Member Board to have more active involvement of the future of our Society. The creation of this JM board has been a tremendous success. Not only did the membership of the ERS increase significantly from 1250 in 2010 to over 2500 in 2016 (Figure 1). The JM actively contributed to the last congress programmes and from this year on the chair of the JM will be member of the executive committee of the ERS. We now have a task to keep all these active juniors as active members of the ERS for the rest of their working life and to further expand not only the numbers but also the impact of our society.

In this issue of Rhinology, some of the JM board volunteered to write the editorial. We wish you a lot of fun reading it.

*Wytske Fokkens, Editor in chief*

Young, enthusiastic doctors are the essential pillar of the innovation and progress in medicine. In order to nourish this tremendous potential in the field of rhinology, the Junior Members (JM) Board (Figure 2) was founded in 2010 during the European Rhinologic Society (ERS) congress in Geneva to promote and support Ear, Nose and Throat clinicians and researchers under the age of 35 years.

We believe that quality is not necessarily the consequence of autonomy. Therefore we see the collaboration between JM as a critical role of the board. To foster such efforts, we create oppor-

tunities for JM to participate at congresses and meetings, share clinical and research experience and discover new networking possibilities.

Over the last six years, numbers of JM are steadily rising. Nowadays, the ERS consists of 40% JM and we are becoming a strong part of the society. This achievement would be impossible without the incredible support of ERS. Currently, we are organising the JM sessions at the 4th Congress of European ORL-HNS in Barcelona and ERS Congress in London. We will be providing a highly varied and relevant program for young clinicians and researchers.

We are delighted to invite all our JM to these sessions!

*Pavol Surda, Chair ERS Juniors*

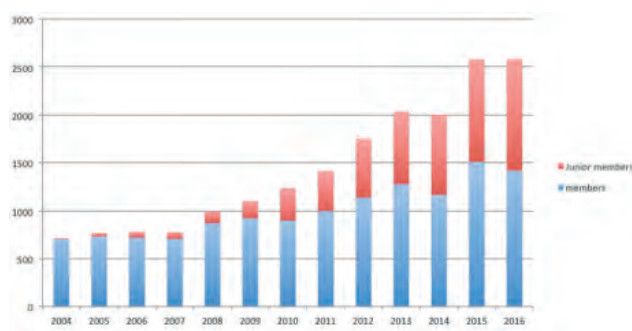


Figure 1. ERS membership numbers.

## Chronic rhinosinusitis: new understanding of specific and general Quality of Life scores

Our goal in treating chronic rhinosinusitis (CRS) is to reduce sinonasal symptoms and improve quality of life (QoL). In patients with CRS, sinonasal symptoms have a significant impact on QoL<sup>(1,2)</sup>. Various validated measures exist to quantify QoL such as the 22-item Sinonasal Outcomes Test (SNOT- 22) and MSNOT-20 Young Persons Questionnaire (MSYPQ)<sup>(3,4)</sup>, specific to CRS, while others measure general QoL, such as the Euro-QoL 5-Dimensional general health-related QoL survey (EQ5D). In this issue, Erskine et al.<sup>(5)</sup> and Hoehle et al.<sup>(6)</sup> present two interesting CRS quality of life studies, which further develop our understanding.

Erskine et al. compared SNOT-22 total and subdomain scores in patients with different types of CRS and between genders. Patients with CRS with nasal polyps (CRSwNP) reported higher

mean symptom scores in the nasal domain than those with CRS without nasal polyps (CRSsNP). Interestingly, women with both CRSwNP and CRSsNP reported higher total scores than men<sup>(5)</sup>. Authors propose that SNOT-22 may be of use to General Practitioners in assessing treatment responses and/or onward referral, even without nasendoscopy, avoiding harmful delays in treatment escalation and referral<sup>(7,8)</sup>, in addition to helping choose treatment algorithms and predict postoperative outcomes<sup>(9)</sup>.

In addition to specific QoL instruments, general QoL instruments are important as they can be standardized enabling direct comparisons of disease burden and calculations of cost-effectiveness of interventions. Endoscopic sinus surgery (ESS), has been shown to improve general health and specific

<sup>(10)</sup> related QoL <sup>(11)</sup>. It remains unclear how each of the CRS symptom domains (sleep, nasal, otological/facial pain and mood) individually impact general QoL in CRS patients. In this issue, Hoehle et al. demonstrated that otological/facial pain subdomain scores had the largest impact on EQ5D-VAS, followed by sleep scores while interestingly nasal subdomain scores had the least impact on general health-related QoL <sup>(6)</sup>. These findings may enable ENT surgeons to identify which CRS patients may gain greatest general QoL improvement with treatment options targeted at specific symptoms, whilst also improving treatment cost-effectiveness.

In the treatment of patients with CRS the goal is to re-establish normal mucosal function and ventilation of the sinuses. Nasal irrigation can help reduce mucosal inflammation and remove secretions, debris and crusts accumulated within the nasal cavity due to temporary dysfunction of nasal mucociliary transport. A Cochrane review by Harvey et al. demonstrated that nasal saline irrigation reduces nasal symptoms and increases quality of life in patients with CRS <sup>(12)</sup>. Recently, it has been suggested that nasal saline irrigation should be combined with topical corticosteroids to better reach the sinus by promoting distribution of corticosteroids to the sinuses <sup>(13)</sup>. Improved delivery of topical steroids was also observed after FESS <sup>(14)</sup>. In this issue, Giotakis et al. show in a randomized trial that post-operative high volume nasal saline irrigation (250 ml two times a day) in patients with chronic rhinosinusitis with nasal polyposis (CRSwNP) improves symptoms after FESS. Both nasal symptoms as well as general symptoms improved, especially post nasal drip <sup>(15)</sup>.

Bacterial biofilms have been implicated in both acute and chronic rhinosinusitis pathogenesis <sup>(17,18)</sup>. In 2007, Harvey and Lund published a systematic review in this journal of the evidence for biofilms as the mediator of the inflammation in CRS and highlighted the considerable potential for research in this field <sup>(18)</sup>. Recently, Ivancehniko et al. investigated the sinus microbiome in CRS to further understand the influence of microbiota to the disease pathophysiology. However, results

did not show a clear correlation with the identified species to CRS <sup>(19)</sup>. Danielsen et al. reported in this journal that patients with chronic rhinosinusitis had significantly increased biofilm point prevalence compared to controls <sup>(17)</sup>. Targeted treatment of sinonasal biofilms with long-term efficacy has not yet been described. Systemic antibiotics are limited in their treatment to control infection in the sinonasal compartment <sup>(20)</sup>. Weissman et al. has previously shown that xylitol for sinonasal irrigation, a non-antibiotic inexpensive and a well-tolerated agent, resulted in greater improvement of symptoms of chronic rhinosinusitis compared to saline irrigation <sup>(21)</sup>. Moreover, Jain et al., in this issue, further developed our understanding of the mechanisms of xylitol, showing promising in vitro findings of Xylitol <sup>(22)</sup>. They found Xylitol had variable activity against biofilms and planktonic bacteria in vitro. When compared with saline, Xylitol significantly reduced biofilm biomass (*S. epidermidis*), inhibited formation (*S. aureus* and *P. aeruginosa*) and reduced planktonic bacteria (*S. epidermidis*, *S. aureus* and *P. aeruginosa*).

Functional endoscopic sinus surgery (FESS) is considered a safe and effective procedure. The main perioperative complication of FESS is hemorrhage, which is seen in around 5% of the patients whilst major complications occur in less than 1% of patients <sup>(23,24)</sup>. However, if major complications occur, especially neurologic complication, they can vary. In the published online version, Kubik et al. compared the associated neurologic morbidity between early and delayed interventions in patients diagnosed with iatrogenic CSF leaks from FESS. They showed that delayed diagnosis of iatrogenic skull base injuries is associated with higher rates of neurologic morbidity and postoperative meningitis, indicating the need for early intervention <sup>(25)</sup>.

In this issue, we advance our understanding of quality of life scores and their impact on treatment targeting, whilst the latest developments in CRS medical and surgical management are discussed in our quest to improve the quality of life of those with CRS.

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Figure 2. ERS Junior Member Board 2016.

*Anna Slovick, Marjolein Cornet, Pavol Surda, Peter Valentin Tomazic - ERS Juniors*