

Systematic reviews and meta-analysis: accumulated evidence helps in daily practice

The number of well performed randomized controlled trials in Rhinology is rising exponentially. Pubmed shows in searching for “chronic sinusitis” or “chronic rhinosinusitis” or “nasal polyps”) 64 papers before 2000, 214 papers between 2000 and 2012 (evaluated in EPOS2012), and now another 225 in the last 7-8 years to absorb the large amount of data produced.

It becomes more and more difficult to stay on top of the enormous mountain of data produced and to be remain fully up to date in the management of our patients. For that reason, the publication of systematic reviews and meta-analyses to help our readers to literally stay on top of the publication mountain becomes increasingly important. The benefits of systematic reviews and meta-analysis include a consolidated and quantitative review of a large, and often complex, sometimes apparently conflicting, body of literature.

Outcomes from meta-analyses include more precise estimates of the effect of treatment or risk factor for disease than individual studies contributing to the meta-analysis. Journal Rhinology published a significant number of systematic reviews and meta-analysis in the past few years on vary different subjects⁽¹⁻⁴⁾. In this issue of the journal, 2 new meta-analyses are added: a meta-analysis of Kolia et al. on the effect of total intravenous anaesthesia (TIVA) versus inhaled anaesthesia for endoscopic sinus surgery. A paper I hope you can all use to convince your anaesthetist, if still needed, that TIVA with propofol, is the preferred anaesthetic method for endoscopic sinus surgery. The second by Lee et al. on revision adenoidectomy in children showing that revision adenoidectomy happens to all of us irrespective of setting, age at initial surgery or surgical techniques. In a few months we will publish the European Position Paper

on Rhinosinusitis and Nasal Polyps: EPOS2020. It will contain systematic reviews and meta-analysis on all the management of chronic rhinosinusitis. A huge effort that hopefully will benefit our readers in the daily difficult decisions how to best manage their patients. Going through all the literature in our field also shows that we have still a lot to gain in the quality of the reporting of the research we perform. Hopkins et al. published a core outcome set for publication on CRS that I hope and expect every author will consult when setting up a study⁽⁵⁾. Moreover, participating in a systematic review/meta-analysis clearly helps young researchers to understand the need for good reporting. We hope we can publish many of these analyses in our Journal in the coming years. Of course, we need well performed trials to fuel our systematic reviews and meta-analysis. In this issue of the journal, I particularly enjoyed reading the paper of Hopkins on the immense amount of probably inappropriate use of antibiotics in primary care in patients with CRS without exacerbation. The study shows a clear increasing trend towards macrolide and tetracycline use most likely based on the studies published with these antibiotics in recent years⁽⁶⁻⁸⁾. Unfortunately, the effect size in these studies was very small and combined with the recent worries on the risk of mortality and cardiovascular events following macrolide prescription⁽⁹⁾ it might be worthwhile to reconsider their use. On one hand we may conclude that the use of these antibiotics should be reserved to secondary/tertiary care. On the other hand the increase of probably inappropriate use of these antibiotics points to the responsibility of researchers not to blow up their findings and again to the importance of systematic reviews and meta-analysis to try to put data in the best possible perspective.

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