

Research - not lost in translation

Although many universities pay lip service to the concept of translational research, most academic research assessments are based on basic science contributions which are associated with publication in high impact journals. Clinicians and particularly surgeons are often made to feel somewhat inferior in these exercises but we should never lose sight of the effect which we have on our patients' well-being and these activities are often underpinned by sound experimental work as evidenced by a number of the contributions in this issue.

Plouin-Gaudon and colleagues (page 249) ⁽¹⁾ elegantly demonstrate the importance of intracellular *Staphylococcus aureus* in nasal epithelium as a significant risk factor in the development of recurrent rhinosinusitis and of particular relevance in those patients resistant to medical and surgical treatments. The authors are to be commended for this work which won the 2006 Clinical Research prize from the European Rhinologic Society as it also opens up the possibility of new therapeutic strategies. Once thought of only as a commensal, *S. aureus* remains a common finding in carefully conducted microbiological studies of chronic rhinosinusitis ⁽²⁾. *S. aureus* enterotoxins are now thought to play a role in the development of nasal polyposis as well as severe asthma and exacerbations of chronic obstructive airway disease ⁽³⁾ and may also contribute to the pathogenesis of Wegener's granulomatosis, the subject of one of our review articles (page 227) ⁽⁴⁾ leading to the use of anti-staphylococcal creams such as neomycin sulphate 0.5% by some clinicians. This serves as an important reminder how we in ENT and especially as rhinologists, are the most likely to see patients with the early manifestations of Wegener's and should have a low threshold of suspicion. In a recent study 43% of 183 patients had a delay of 6 months or longer between presentation with symptoms and ultimate diagnosis of this condition ⁽⁵⁾.

The effects of surgery on restitution of normal mucociliary clearance in chronic rhinosinusitis is explored by both



Guervara et al (page 255) ⁽⁶⁾ and Melgarejo Moreno and Meseguer (page 259) ⁽⁷⁾. The effect of airflow on goblet cell density has been previously explored experimentally by others ⁽⁸⁾ showing that higher densities of cells are found in areas protected from the trauma of air currents. Improvement in saccharine clearance time has been shown after endoscopic sinus surgery ⁽⁹⁾ but the results of direct examination of maxillary sinus mucosa are more equivocal ⁽¹⁰⁾ and may be influenced by the surgical technique ^(11,12). Generally both experimental and clinical studies support a more conservative approach to mucosal preservation ^(13,14).

Finally readers will be pleased to hear that plans are well underway for electronic submission beginning early in 2007. We are presently ironing out the usual glitches associated with this exercise but it will undoubtedly make the process of submission and review more streamlined for all concerned. Watch this space!

In the interim I, Professor Fokkens, the Editorial Board and Administrative Officers would all like to wish you seasonal greetings and every success in 2007.

REFERENCES

1. Plouin-Gaudon I, Clement S, Huggler E, Chaponnier C, François P, Lew D, Schrenzel J, Vaudaux P, Lacroix JS. Intracellular residency is frequently associated with recurrent *Staphylococcus aureus* rhinosinusitis. *Rhinology* 2006; 44: 248-253.
2. Kostamo K, Richardson M, Virolainen-Julkunen A et al. Microbiology of chronic hyperplastic sinusitis. *Rhinology* 2004; 42: 213-218.
3. Zhang N, Gevaert P, van Zele T, et al. An update on the impact of *Staphylococcus aureus* enterotoxins in chronic sinusitis with nasal polyposis. *Rhinology* 2005; 43: 162-168.
4. Gottschlich S, Ambrosch P, Kramkowski D, Buchelt T, Gross WL, Hellmich B. Head and neck manifestations of Wegener's granulomatosis. *Rhinology* 2006; 44: 226-232.
5. Srouji IA, Andrews P, Edwards C, Lund VJ. Patterns of diagnosis and treatment of patients with Wegener's granulomatosis in relation to ENT practice. *Laryngoscope* 200; 116: 1621-1625.
6. Guevara N, Hofman V, Hofman P, Santini J, Castillo L. A comparison between functional and radical sinus surgery in an experimental model of maxillary sinusitis. *Rhinology* 2006; 44: 254-257.
7. Melgarejo Moreno P, Hellin Meseguer D. Submucosal glands and goblet cells in maxillary sinus surgery: an experimental study in rabbits. *Rhinology* 2006; 44: 258-262.
8. Sorensen HB, Larsen PL, Tos M. The influence of air current on goblet cell density in the mucosa of the uncinat process in the nasal cavity. *Rhinology* 2006; 44: 188-192.
9. Ragab S, Lund VJ, Scadding GK. Evaluation of medical and surgical treatment of chronic rhinosinusitis: a prospective randomised control trial. *Laryngoscope* 2004; 114: 923-930.
10. Myller J, Toppila-Salmi S, Torkkeli T, Heikkinen J, Rautiainen M. Effect of endoscopic sinus surgery on antral mucociliary clearance. *Rhinology* 2006; 44: 193-196.
11. Forsgren K, Westrin Km, Fukami M, Stierna P. Effects of surgery on mucosal pathologic changes following experimental sinusitis in rabbit. *Ann Otol Rhinol Laryngol* 1998; 107: 155-163.
12. BenningerMS, Kaczor J, Stone C. Natural ostiotomy vs inferior antrostomy in the management of sinusitis. An animal model. *Otolaryngol Head Neck Surgery* 1993; 109: 1034-1042.
13. Kennedy DW, ShaalanH. Reevaluation of maxillary sinus surgery: experimental study in rabbits. *Ann Otol Rhinol Laryngol* 1989; 105: 357-366.
14. Min YG, Kim IT, Park SH. Mucociliary activity and ultrastructural abnormalities of regenerated sinus mucosa in rabbits. *Laryngoscope* 1994; 104: 1482-1486.

Valerie J. Lund

Editor-in-chief