

Smoking, self-destructive behaviour?

This issue of *Rhinology* contains a case series of patients presenting with nasal self-destructive behaviour. It can be extremely difficult to diagnose and treat self-destructive behaviour as Rudolph et al. shows in the current issue ⁽¹⁾. Nevertheless, a heightened awareness of the ENT surgeon regarding this syndrome may help prevent the exposure of these patients to unnecessary medical and surgical procedures and their potential complications. This will often lead to incooperative and uncooperative patients, a behaviour that can frequently be observed, if the patients do not receive their medically sanctioned injury. However, to fulfil the patient's wish would not only be unethical but also unproductive, as the results of surgical treatment in these patients are highly unsatisfactory and recurrences very common ⁽²⁾. Patients with self-destructive behaviour should always receive long-term psychotherapy.

In this editorial I would like to draw your attention to two forms of self-destructive behaviour that are usually more easily recognised: The first is the use of cocaine. Cocaine can lead to large ulcerations in the nasal and sinus area ^(3,4). Patients usually deny the use of cocaine and the clinical picture can resemble closely Wegener's Granulomatosis ^(3,4). Cocaine-induced midline destructive lesions may even lead to the presence of PR3-ANCA and histopathologically mimic leukocytoclastic vasculitis ⁽⁵⁾. Urine toxicology screen for cocaine metabolites can be helpful in confirming the diagnosis, which is also important, as cessation of cocaine use is an absolute requirement before nasal reconstruction can be considered.

One form of self destructive behaviour that is easily recognized is smoking. Contrary to other forms of self destructive behaviour as described by Rudolph, smoking is easily diagnosed by the ENT surgeon and is usually readily admitted by the patient. In sharp contrast to the lower airways relatively little literature can be found on the effect of smoking on the nose and sinuses ⁽⁶⁾. Tobacco smoking is a well-established risk factor for the development of squamous cell carcinoma of the head and neck ⁽⁷⁾. The number of papers describing other effects of smoking on the nose and sinuses is limited ⁽⁸⁻¹¹⁾.

In this issue of *Rhinology* the results of an interesting study on the effect of smoking on the olfactory function are reported ⁽¹²⁾. Katotomichelakis and colleagues investigated the effect of cigarette smoking on the olfactory function, using the extensive "Sniffin' Sticks" test measuring of odour threshold (OT), odour discrimination (OD)

and odour identification (OI) ⁽¹²⁾. Multivariate logistic regression analysis revealed that smoking is a strong independent risk factor of changes in different aspects of olfactory function. Among smokers, statistically significant negative relationships were found between pack-years and olfactory function. Smokers were found to be up to almost six times more likely to evidence an olfactory deficit than non-smokers, depending on the duration and the amount of cigarettes smoked. In the previous issue of *Rhinology*, Ishimaru showed that the olfactory deficit is definite: CC-SIT scores of current and previous smokers were similarly bad and lower than those of the non-smoking subjects ⁽¹³⁾. Even among healthy volunteers who denied any olfactory disturbances, smokers had a lower score than non-smokers in the smell identification. Unlike other types of self - harming behavior, smoking is also associated with harm to others: if we stay with olfaction, passive smoking has been shown in adults and children to have deleterious effects ^(14,15), but also, more importantly, chronic smoke exposure has been implicated as a risk factor for otitis media, rhinitis and bronchitis ⁽¹⁶⁻¹⁸⁾. For rhinologists it is also important to realize that both smoking and passive smoking are associated with worse outcomes after FESS ^(19,20).

Otorhinolaryngologists are directly involved in the diagnosis and management of smoking related diseases, including upper airway malignancy. However, encouraging and supporting smoking cessation appears to be of low priority in the average rhinology practice. The European Respiratory Society taskforce on smoking cessation in patients with respiratory diseases advises that smoking cessation should be an integral component in the management of respiratory disorders ⁽²¹⁾. They also advise that the therapies should include pharmacological treatment combined with behavioral support and that the respiratory physicians should receive training to ensure that they have the knowledge, attitudes and skills necessary to deliver these interventions. Data on the percentage of ENT surgeons applying these guidelines are not available. However, the extremely low interest in the rhinological literature does not indicate a high interest in the subject. Only one paper on smoking cessation was found in the otorhinolaryngological literature ⁽²²⁾. It is important that the specialists have the skills to treat smoking and nicotine dependence. Smoking cessation is one of the most important ways to improve the prognosis of patients with respiratory disease. We need more interest for this subject within the rhinological literature and also in our daily practice.

REFERENCES

1. Rudolph S, Schu U, Herrmann-Lingen Ch., Werner JA, Folz BJ. Nasal manifestations of self-destructive behaviour. *Rhinology*. 2007; 45: 299-304.
2. Tollefson TT, Kriet JD, Wang TD, Cook TA. Self-induced nasal ulceration. *Arch Facial Plast Surg*. 2004; 6: 162-166.
3. Sproson EL, Jones NS, Al-Deiri M, Lanyon P. Lessons learnt in the management of Wegener's Granulomatosis: long-term follow-up of 60 patients. *Rhinology*. 2007; 45: 63-67.
4. Gottschlich S, Ambrosch P, Kramkowski D, Laudien M, Buchelt T, Gross WL, et al. Head and neck manifestations of Wegener's granulomatosis. *Rhinology*. 2006; 44: 227-233.
5. Rowshani AT, Schot LJ, ten Berge IJ. c-ANCA as a serological pitfall. *Lancet*. 2004; 363: 782.
6. Plaschke PP, Janson C, Norrman E, Bjornsson E, Ellbjar S, Jarvholm B. Onset and remission of allergic rhinitis and asthma and the relationship with atopic sensitization and smoking. *Am J Respir Crit Care Med*. 2000; 162: 920-924.
7. Goldenberg D, Lee J, Koch WM, Kim MM, Trink B, Sidransky D, et al. Habitual risk factors for head and neck cancer. *Otolaryngol Head Neck Surg*. 2004; 131: 986-993.
8. Benninger MS. The impact of cigarette smoking and environmental tobacco smoke on nasal and sinus disease: a review of the literature. *Am J Rhinol*. 1999; 13: 435-438.
9. Das S, Becker AM, Perakis H, Prosser JD, Kountakis SE. The Effects of Smoking on Short-Term Quality of Life Outcomes in Sinus Surgery. *Laryngoscope*. 2007 Sep 20 [Epub ahead of print].
10. Maeda Y, Okita W, Ichimura K. Increased nasal patency caused by smoking and contraction of isolated human nasal mucosa. *Rhinology*. 2004; 42: 63-67.
11. Virkkula P, Bachour A, Hytonen M, Malmberg H, Salmi T, Maasilta P. Patient- and bed partner-reported symptoms, smoking, and nasal resistance in sleep-disordered breathing. *Chest*. 2005; 128: 2176-2182.
12. Katotomichelakis M, Balatsouras D, Tripsianis G, Davris S, Maroudias N, Danielides V, Simopoulos C. The effect of smoking on the olfactory function. *Rhinology*. 2007; 45: 273-280.
13. Ishimaru T, Fujii M. Effects of smoking on odour identification in Japanese subjects. *Rhinology*. 2007; 45: 224-228.
14. Ahlstrom R, Berglund B, Berglund U, Engen T, Lindvall T. A comparison of odor perception in smokers, nonsmokers, and passive smokers. *Am J Otolaryngol*. 1987; 8: 1-6.
15. Nageris B, Braverman I, Hadar T, Hansen MC, Frenkiel S. Effects of passive smoking on odour identification in children. *J Otolaryngol*. 2001; 30: 263-265.
16. Halken S, Host A, Nilsson L, Taudorf E. Passive smoking as a risk factor for development of obstructive respiratory disease and allergic sensitization. *Allergy*. 1995; 50: 97-105.
17. Topp R, Thefeld W, Wichmann HE, Heinrich J. The effect of environmental tobacco smoke exposure on allergic sensitization and allergic rhinitis in adults. *Indoor Air*. 2005; 15: 222-227.
18. Richardson MA. Upper airway complications of cigarette smoking. *J Allergy Clin Immunol*. 1988; 81: 1032-1035.
19. Kim HY, Dhong HJ, Chung SK, Chung YJ, Min JY. Prognostic factors of pediatric endoscopic sinus surgery. *Int J Pediatr Otorhinolaryngol*. 2005; 69: 1535-1539.
20. Briggs RD, Wright ST, Cordes S, Calhoun KH. Smoking in chronic rhinosinusitis: a predictor of poor long-term outcome after endoscopic sinus surgery. *Laryngoscope*. 2004; 114: 126-128.
21. Tonnesen P, Carrozzi L, Fagerstrom KO, Gratziau C, Jimenez-Ruiz C, Nardini S, et al. Smoking cessation in patients with respiratory diseases: a high priority, integral component of therapy. *Eur Respir J*. 2007; 29: 390-417.
22. Bende M, Burian P, Danielsson GP, Kruse E, Millqvist E, Sawe U. Evaluation of side effects after nicotine nasal spray in patients with chronic rhinitis. *Rhinology*. 1998; 3: 98-100.



Wytske J. Fokkens
Associate Editor