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Letters to the Editors

Prevalence of back and neck pain amongst ENT consultants: national survey. *J Laryngol Otol* 2003;**117**:979–82

Dear Sirs,

The report by Babar-Craig *et al.*[1] highlights a problem that many surgeons are exposed to at some point in their careers—namely occupational posture that may result in back and neck symptoms. Whilst I commend the authors for undertaking this study, I suggest that they have made some errors in designing the study and analysing the data.

Firstly, they tried to survey the ENT consultant population in the UK—but unfortunately 42 per cent failed to reply. Because those with symptoms are more likely to respond, selection bias can easily occur here, which, of course, would tend to overestimate the prevalence. It would have been helpful in this situation to assess the responders (or non-responders) to see if it was representative of the population, particularly in terms of confounding variables (age, gender, sub-specialty).

Another potential source of bias is the subjective questioning that was used. It is better in this case, to place emphasis on more objective questions (GP or physiotherapy visits, prolonged use of NSAIDs/analgesics). This is likely to be a more accurate measure of clinically significant symptoms.

They then go on to state that the average age of their group is statistically lower than that of the normal population. This is a completely meaningless comparison, since back and neck pain is associated with degenerative disease and age is, therefore, a confounding factor. In other words, one can assume the normal population in this case includes everyone above retirement age and would therefore make up a large proportion of those with symptoms.

Incidentally, since the ages of those who responded to the survey are unlikely to be normally distributed (the age distribution of ENT consultants in the UK is probably positively skewed), a more accurate description of central tendency would be the median (or geometric mean if positively skewed).

Finally, in their assessment of sub-specialities, they report actual numbers with symptoms rather than percentages. For example, one cannot say that otologists have the highest prevalence of back or neck pain without revealing the total number of otologists who responded.

In conclusion, I suggest that the prevalence of back and neck pain in ENT consultants has been overestimated by this study and they have not demonstrated clearly which sub-specialty has the highest prevalence. Furthermore, the authors have not really established any link between these symptoms and occupational risks, because no attempt was made to control the many confounding factors that exist (by using a suitable control population). It certainly would be interesting to repeat the study addressing these problems and perhaps to compare the results with those of another consultant population, both within surgery (e.g. orthopaedics) and outside (e.g. psychiatry).

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References

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Authors' reply

Thank you for asking us to respond to Mr Hobbs letter.

This study was aimed to determine the prevalence of neck and back pain in ENT consultants in the UK. Occupational neck and back pain are well known causes of morbidity and loss of productivity amongst nurses and others and this work recognizes, for the first time, the high prevalence of symptoms within our own specialty.

In this study we used a postal questionnaire to assess the population and had a 58 per cent response rate which is good for such surveys. We would accept the problems of bias in all clinical studies but the suggestion by Mr Hobbs that we should further assess non-responders is, by definition, a difficult proposition.

We chose to assess the clinical significance of symptoms by determining the intervention that respondents had sought, in particular, the requirement for physiotherapy, osteopathy or chiropractice. The use of simple pain killers is not, in comparison, as objective a measure of morbidity and impossible to quantify in a retrospective manner.

The age data were analyzed using parametric methods as age is a normally distributed variable. The mean age of the respondents in our survey was 47 years, which may be considered young for significant back and neck morbidity. Although our comparison with the general population would include those beyond retirement age it would be logical to expect that the proportion of individuals within our survey population with symptoms will grow in number and severity with advancing years.

In response to Mr Hobbs penultimate paragraph we are happy to confirm that analysis of total numbers does confirm that otologists did, in fact, have the highest prevalence of back and neck symptoms within our survey group.

In summary, while further work will no doubt be required, this original work provides the first evidence of significant back and neck morbidity amongst otolaryngologists.

We would like to take this opportunity to thank Mr Hobbs for his interest in our study.

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Intranasal steroid sprays in the treatment of rhinitis: is one better than another? *J Laryngol Otol* 2003;**117**:843–45

Dear Sirs,

Waddell and colleagues[1] conclude that since there are no safety or efficacy differences of note between the various

available nasal corticosteroid sprays, then cost should determine choice of treatment. This conclusion is inappropriate and based on a number of incorrect assumptions.

Although many of the sprays have a similar side-effect profile, the potential for causing corticosteroid-related systemic side effects varies considerably between the different steroids and depends largely on their systemic bioavailability.

The choice of one of the new corticosteroids, such as fluticasone propionate or mometasone furoate, where the systemic bioavailability, following intranasal dosing, is an order or magnitude lower than that for any of the other preparations is clearly desirable, given similar efficacy. The therapeutic index is of greater significance when one considers that the patient (the risk is especially significant in children) may receive corticosteroids from more than one source to treat co-morbid conditions—approximately 80 per cent of asthmatics also have rhintis. Therefore the total steroid load which the body receives can be significant and careful choice of treatment can minimize the potential for systemic side effects.

There is clear evidence of a reduction in growth rate with intranasal beclomethasone (BDP);[2] this is not the case with mometasone furoate or fluticasone propionate[3,4] under similar one-year stadiometry study designs. The study by Wilson *et al.*[5] cited by the authors, appears to be aberrant, given the large body of available data on fluticasone propionate and its published pharmacology. The study has now been repeated independently and the original findings were not confirmed.[6]

There is emerging evidence of an additive effect on growth rate when BDP is given concomitantly to nose and lung.[7] There is no such additive effect with fluticasone propionate.[7,8] The bioavailabilities (%F) of the more commonly used nasal corticosteroid preparations are given in Table 1 below.[9]

This situation is predictable from the pharmacology and those corticosteroids even more bioavailable than BDP will carry more risk—dexamethasone which is included in Waddell *et al.'s* list of suitable sprays, is a first generation steroid, will be ∀ 100 per cent bioavailable, and should be used rarely and sparingly in children and also with caution in adults, for short periods only. Similar considerations apply to betamethasone (Betnesol®) which has been shown to cause Cushing's syndrome in children.[10] Regular prescription of these cheap medications is inadvisable.

Furthermore, before any intervention with nasal corticosteroids, consideration should be given to identification and reduction of any exacerbating factors of the allergic disease.

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TABLE I
BIOAVAILABILITIES OF COMMONLY USED NASAL CORTICOSTEROID PREPARATIONS

Corticosteroid	Usual daily dose (mcg)	%F
Triamcinolone	220^{IN}	46
Beclomethasone (BDP)	336^{IN}	44
Budesonide	128^{IN}	31
Mometasone	200^{IN}	0.46
Fluticasone	200^{IN}	0.42
Prednisolone	10000^{PO}	82

IN = intranasal; PO = oral

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Authors' reply

We thank Dr Scadding and Mr Richards for their letter.

In our review we acknowledge that different sprays have different bioavailabilities. We reported the effects on the hypothalamic pituitary (HP) axis for the different sprays based on evidence available at the time the paper was written. Obviously this would need updating as good quality studies emerge, and we thank Dr Scadding for bringing the results of these newer studies to the attention of the readership.

We did state the results of the Skoner *et al.* paper showing that beclomethasone produces some suppression of growth and we highlighted problems in the study design especially in the selection of controls. A similar study by Skoner's group showed no suppression with mometasone (both studies were sponsored by the manufacturer of mometasone).

We were unaware of any trials showing that fluticasone causes growth suppression and again thank Dr Scadding for highlighting the study by Allen *et al.* Of course prior to comparing papers for different sprays, one must make sure the trial conditions are similar (e.g. inclusion/exclusion criteria including age, outcome measures etc).

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