

Letters to the Editor

Is a community-based mastoid microsuction service feasible: the audit of a pilot project

Dear Sir,

Lewis and Resouly (1995) described their experiences at transferring mastoid microsuction to the community, the procedure being performed by the first author who is a General Practitioner. This clinician had prior experience in otolaryngology as a clinical assistant.

Whilst the removal of debris by microsuction is relatively straight forward, the assessment of the mastoid cavity is very complex. One requires the experience to recognise recurrent or residual cholesteatoma, infections and discharge secondary to a tortuous cavity, the possibility of future hearing reconstruction and the understanding of the purpose behind these surgical procedures. Thus, managing post-mastoidectomy patients is far from simple and we believe should remain exclusively within the domain of otolaryngology practice in hospitals.

It is apparent that several factors will reduce the number of patients suitable for treatment in the community to such an extent that the service may not be viable at all.

Firstly, the pilot study did not make a distinction of patients who had cortical and modified radical mastoidectomies. Since cortical mastoidectomies were performed for non-cholesteatomatous disease, they do not usually require the attention and microsuction given to the modified radical cavities. Secondly, the study clearly indicated that a community-based microsuction service is only viable if it can be expanded to accommodate an estimated 250 patients, a more than 4-fold increment of the present number described in the study. This will eventually complicate travelling and appointment arrangements as patients come from distant general practices and offset the initial benefits. The patient review procedure is likely to be further complicated by referring patients to the hospital especially if they originate from other practices. Finally, the study found that eight out of 35 patients (23 per cent) required regular review and microsuction, indicating that the majority of post-mastoidectomy patients discharged back to the community do not require regular treatment.

We agree with the authors' conclusion that otolaryngology outpatients is extremely busy and efficiency needs to be improved.

In connection with this, we can reveal that at North Staffordshire Hospitals Trust, an advanced ear

care clinic staffed by a specially trained nurse has been implemented to accommodate a proportion of the general outpatient workload. Microsuction is performed for a whole range of ear conditions including wax impaction and selected mastoid cavities.

The advantages over the community-based service are that there are no additional equipment costs, better facilities, immediate consultant access and a very economical service. We believe this is the way forward in efficiently and successfully administering microsuction treatment.

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Reference

Lewis, C. H., Resouly, A. (1995) Is a community-based mastoid microsuction service feasible: the audit of a pilot project. *The Journal of Laryngology and Otology* **109**: 971–974.

Author's reply

We thank Mr Zeitoun and colleagues for their comments about our paper and would like to answer the points raised.

We agree that the assessment of the mastoid cavity can be complex but the routine follow up of mastoidectomy patients in the ENT outpatient clinic is usually delegated to junior training doctors. C.H.L. has now worked as a Clinical Assistant in his local ENT department for 14 years and for the same Consultant (A.R.) since 1986. He has performed several hundred micro-suction treatments in General Practice since acquiring his operating microscope. It is likely that his experience in cleaning and assessing mastoid cavities is at least comparable to that of junior ENT staff.

Eighty-seven patients are now being treated in the community-based mastoid microsuction clinic. Their diagnoses are summarised as follows: modified

radical mastoidectomy: 47; otitis externa: 17; perforated tympanic membrane: 8; cortical mastoidectomy: 7; myringoplasty: 4; fenestration cavity: 2; attic retraction pocket: 1; T-tube grommet: 1. Seventy-two of these patients were transferred from the ENT outpatient clinic and as a consequence it is estimated that 252 hospital episodes/year have been saved. Nine patients were referred to C.H.L. by other general practitioner colleagues usually for treatment of long-standing otitis externa. All patients were examined under the microscope in the community clinic but this may not be possible in a busy hospital outpatient clinic where the operating microscope is not always readily available.

All patients in the original pilot project were from C.H.L.s' general practice. Fifty-nine out of eighty-seven patients currently under community follow-up are registered with neighbouring practices. Agreement was reached by C.H.L. and A.R. to treat patients from these practices after discussing the project with the Local Medical Committee and also by writing to all local practitioners. No problems have been experienced treating these patients. If re-referral back to the hospital ENT outpatient clinic is required this is performed by C.H.L. and the patient's own general practitioner is notified.

Patients report satisfaction with the community service as appointment times and days are flexible to accommodate patient preference. The average time saved per consultation on attending the community clinic is 86 minutes when travelling, parking and outpatient waiting are taken into account. The microsuction patients are generally seen in C.H.L.s' ordinary surgery and on average can expect to be seen within five minutes of their appointment time.

In our paper we were unable to define the ideal population size to support a community clinic. We felt that eventually 250 patients' care might be transferred but this figure may be over optimistic. At present 87 patients are being treated and this figure continues to slowly increase.

Undoubtedly routine mastoid examination and microsuction can be performed in a variety of clinical settings. The North Staffordshire model using a specially trained nurse will be appropriate in some areas and our community-based service suitable elsewhere. Hospital-based services, however, do generally suffer from the disadvantages of inflexible appointment times, problems with travelling to and parking at the hospital and treatment by different staff at each attendance without the continuity of care and level of expertise offered by the Portsmouth Project.

Adel Resouly, F.R.C.S.,
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Analysis of CT scanning referrals for chronic rhinosinusitis

Dear Sir,

I read with great interest the article by White *et al.* in the *Journal of Laryngology and Otology* in July 1996, entitled 'Analysis of CT scanning referrals for

chronic rhinosinusitis'. The authors have correctly emphasized the importance of prior medical therapy and nasal endoscopy before scanning. The potential side effects of radiation are also rightly emphasized.

However, the authors' conviction that use of CT 'purely as a diagnostic test for rhinosinusitis is inappropriate' does not appear to be well founded. In clinical practice, sometimes in spite of a thorough history, physical examination and nasal endoscopy diagnosis of chronic rhinosinusitis can not be confirmed or ruled out. Clinicians, then have to rely on radiologic means to make a diagnosis. The fallacy of plain sinus radiographs in these situations has been well described (Mafee, 1994). The usefulness of CT scan in these situations cannot be overemphasized. In these patients, at least a limited sinus CT scan may be considered. The dosage of radiation in the studies have been described to be acceptable (White *et al.*, 1991; Rowe-Jones *et al.*, 1995). From a clinicians viewpoint, its unfair to describe sinus CT as purely pre-operative or to expect about 80 per cent of those having CT scans to go for surgery.

References

- Mafee, M. F. (1994) Modern imaging of paranasal sinuses and the role of limited sinus computerized tomography: consideration of time, cost and radiation. *Ear, Nose and Throat* **73**: 532-546.
- Rowe-Jones, J., MacKay, I., Colquhoun, I. (1995) Charing Cross CT Protocol for endoscopic sinus surgery. *The Journal of Laryngology and Otology* **109**: 1057-1060.
- White, P. S., Cowan, I. A., Robertson, M. S. (1991) Limited sinus CT scanning techniques of the paranasal sinuses. *The Journal of Laryngology and Otology* **105**: 20-23.

Author's reply

Your reader highlights an important issue. This audit of referral practice was instigated at the request of our radiology colleagues who had expressed concern over the number of otherwise healthy patients undergoing CT scanning. I take issue with the view that 'the dosage of radiation. . . have been described to be acceptable', noting that the references quoted predate Maclennan, (Maclennan, 1995). He measured the tissue radiation dose associated with sinus CT, (including mini-scan protocols) throughout Scotland, and demonstrated radiation doses of between three and 14 times the annual average recommended maximum dose to the general public. The investigation then is clearly not without some risk, and while we are not suggesting the CT cannot be used as a diagnostic tool for rhinosinusitis, its use should be limited. Our pre-set standard of 80 per cent of scanned patients reflected the view of our panel of experts, that the scan should be used primarily for planning surgery. This does not mean that in a small minority of patients where diagnosis is proving difficult, despite a full clinical assessment and nasendoscopy, that a CT scan should not be performed. As we stated we accept that a standard of good practice could be established arbitrarily below the 80 per cent level, and this a matter for local