Letters and comments

Parotid cancer treatment with surgery followed by radiotherapy

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COMMENT ON

Shah K, Javed F, Alcock C, Shah KA, Pretorius P, Milford CA.

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We read with interest the paper by Shah *et al* looking at the 15-year experience of parotid cancer in their centre. The review highlights the criticisms frequently aimed at fine needle aspiration (FNA), which often performs poorly outside specialist centres with high non-diagnostic rates. The diagnostic performance of FNA can be improved when undertaken by a cytologist, who can re-aspirate if needed, and with the use of imaging guidance¹ and ancillary techniques, which are expensive and not widely available.

We would suggest that all patients undergoing parotid surgery should ideally have an accurate preoperative cytological/histological diagnosis. We would agree with the authors that preoperative diagnosis is important for operative planning and informed consent of the patients. A non-diagnostic FNA is as unhelpful as a false negative or false positive result. In this paper an accurate preoperative diagnosis was obtained in only 18 of 27 patients. Four patients had a false positive and five patients had non-diagnostic FNA; these results seem high. Twenty-three patients had no preoperative diagnosis at all although this may to some extent reflect the changing trends in preoperative diagnosis.

The authors do not mention the use of ultrasound guided core biopsy (USCB), which has recently been described in the diagnosis of parotid tumours.^{2,3} The procedure is safe, requiring only local anaesthetic, and can be performed on an outpatient basis. This technique utilises a spring loaded biopsy automated device to obtain a core of tissue, usually via an 18G or 20G needle inserted into the parotid lesion. USCB provides a diagnostic accuracy approaching 100% with the advantage over FNA that it provides a core of tissue that can be used for immuno/histochemical analysis, which will allow grading and typing of parotid malignancy (as well as lymphoma). As recognised by Shah *et al*, this ability is a crucial aspect of surgical management, allowing the operation to be tailored according to the tumour. Only 12 of 27

patients (44.4%) who had FNA were accurately subtyped in the study by Shah *et al*.

USCB can be combined with diagnostic ultrasonography to facilitate lesion characterisation and also compartmentalisation (superficial vs deep lobe). Additionally, it can be used to obtain biopsies from the solid parts of necrotic lesions.

We would suggest that USCB is the technique of choice for the diagnosis of parotid tumours. It not only informs the choice of operative intervention but also provides an accurate preoperative diagnosis for the vast majority of patients, which, combined with further staging investigations, should be a baseline requirement for the multidisciplinary team.

References

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Authors' response

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We thank Mandalia *et al* for their interest in our work on the management of parotid malignancy and for their contribution to debate on this difficult issue. We would urge caution, however, in direct comparisons of our published data on fine needle aspiration (FNA) with the published series on ultrasound guided core biopsy (USCB) cited in their comment. It is important to distinguish our retrospective examination of resected malignant tumours from data concerning the entire spectrum of parotid lumps (neoplastic and other), including those for which surgery did not form part of the management. Our study design was able to highlight limitations of cytological assessment in the diagnosis of malignant salivary gland tumours. Despite this, FNA was predictive of malignancy in 18 of 22 patients (81.8%).

The well documented risks of seeding disease (particularly pleomorphic adenoma) to the skin with large gauge core biopsy needles may well be mitigated by newer USCB