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Letters to the Editor

Paragangliomas of the larynx

Dear Sir,

I have read with interest the recent paper of El-Silimy and Harvy entitled 'A clinico-pathological classification of laryngeal paraganglioma (El-Silimy and Harvy, 1992)'. In this paper, the authors describe a 47-year-old woman who presented with pain in the throat and was subsequently found to have an alleged malignant paraganglioma of the larynx in the region of the right arytenoid-aryepiglottic fold which ultimately required a total laryngectomy. Two years after laryngectomy, she developed metastasis to a single right cervical lymph node which was excised. At follow-up 10 years later, she was found to be free of disease.

The authors also reviewed the world literature on laryngeal paragangliomas (LPG's) and concluded from their analysis that there are two groups of LPG's, one of which (their Type I) pursues a rather innocuous clinical course with little tendency for local recurrence or metastasis and the other (their Type II) which is associated with chronic pain and an aggressive clinical course with frequent local recurrence and distant metastasis.

I, too, have recently reviewed the world literature on LPG's (Barnes, 1991) and have concluded, as well as others before me (Woodruff *et al.*, 1985; Wenig and Gnepp, 1989; Woodruff *et al.*, 1991) that almost all alleged malignant LPG's, especially those associated with pain, are in reality unrecognized atypical carcinoids (AC's). Many of the alleged malignant LPG's in the literature have contained mucus, formed glands, demonstrated immunopositivity for calcitonin or carcinoembryonic antigen (CEA), and/or exhibited microvilli on ultrastructural examination. None of these features are found in authentic LPG's. All, however, may be found in AC's.

Since El-Silimy and Harvy almost assuredly reviewed the same cases of LPG's reported in the literature as I did, it would appear that they did not critically evaluate each case but rather accepted the diagnosis at face value. As a result, I believe that the data generated from their literature review are flawed and accordingly, El-Silimy and Harvy continue to propagate the myth that a certain subset of LPG's, particularly those associated with chronic pain (their Type II), are aggressive tumours.

I also have some concern about the authenticity of the 'malignant LPG' contained in the report of El-Silimy and Harvy (1992). The authors, unfortunately, provide very little pathological details. Their statement that 'dense core granules seen on electron microscopy in this case substantiates the diagnosis of paraganglioma' is irrelevant, since neurosecretory granules may be seen in both LPG's and AC's. Furthermore, the single haematoxylin–eosin section of the tumour does not show a 'Zellballen' arrangement of tumour cells which is so characteristic (but not necessarily diagnostic) of paragangliomas. Most importantly, the authors do not indicate whether immunoperoxidase stains for cytokeratin, CEA, and calcitonin were done. Since AC's are positive for these antigens and LPG's are negative, one would be able to make the distinction between these two tumors with a great degree of confidence (Googe *et al.*, 1988; Barnes, 1991; Woodruff *et al.*, 1991). I also would appreciate very much the opportunity to review the microscopic slides of their case and to perform the above immunostains in my own laboratory.

In summary, I continue to believe that the overwhelming majority (97 per cent) of LPG's are benign and that most alleged malignant LPG's contained in the literature cannot be substantiated on close scrutiny and probably represent AC's (Barnes, 1991).

Yours sincerely,

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Dear Sir,

In the July 1992 issue of this journal, Mr El-Silimy and Dr Harvy present a case of a laryngeal tumour diagnosed as a metastasizing laryngeal paraganglioma and propose a clinico-pathological classification of laryngeal paraganglioma.

The case presented is not a convincing case of paraganglioma. It is much more typical of a neuroendocrine carcinoma (atypical carcinoid) both in clinical presentation and pathology. The histology shown does not show characteristic 'Zellballen'. Electron microscopic demonstration of the neurosecretory granules does not discrimi-