Letters to the Editor

Lasers: Importance of power density

Dear Sir,

I recently read the article—'Excision of Benign Laryngeal Lesions: Comparison of Carbon Dioxide Laser with Conventional Surgery' by Robinson and Weir (1987, 101: 1254-1257). I regret that the authors gave no detail of the laser technique which they used. There is a significant difference in tissue response to laser surgery related both to power density of the radiation and length of the application. Tissue reacts differently to different power densities. As important is the interaction between the direct effect of the laser and of the heat produced by its application. Thus short bursts of laser energy have a tissue vaporizing effect whereas longer durations of exposure also produce heating and thus burns. It would be interesting to know whether Robinson and Weir used short pulses of energy or continuous beam because I believe this is an important determinant of tissue reaction. Perhaps an addendum might be provided by the authors of the mode of application and power density.

Yours sincerely

P. W. Alberti Otolaryngologist-Chief,

Mount Sinai Hospital, 600 University Ave., Toronto, Ontario M5G IX5, Canada.

Dear Sir,

The laser was applied in short pulses rather than continously. Pulse duration and power setting were not standardized, but varied between cases.

The aim of our paper was to demonstrate that excision of laryngeal nodules and polyps by conventional means generally gives a satisfactory result, and it is therefore

difficult to see that the laser however precisely applied could confer significant advantage. I regret that I am unable to provide precise details of power density as requested by Professor Alberti but hope that this need not detract from the point that we wish to make.

P. Robinson Senior Registrar in E.N.T.

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Lighting: Aid to pharyngeal pouch identificationDear Sir,

I was interested to read the paper by Barton et al., on using the fibreoptic laryngoscope to facilitate the removal of pharyngeal pouches (Barton et al., 1988, 102: 328–331). This is not a new idea however. It must be at least fifteen years since I first had the idea of placing the end of a fibre light cable into the fundus of a pharyngeal pouch prior to resection.

This has several advantages over a fibreoptic laryngoscope. The lead is longer and so the danger of displacement is much less, the light is much brighter and so makes the sac easier to find, but most importantly the end of the lead is very much thicker than that of the laryngoscope and therefore easily palpable in the tissues of the neck. It may not even be necessary to turn on the light to locate the pouch.

I have taught many of my juniors to use this method over the years and had thought that it was by now commonly used.

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