# Letters to the Editor

### **Nebulized adrenaline**

Dear Sir,

Re: Acute upper airway obstruction following Teflon injection of a vocal cord; the value of nebulized adrenaline and helium/oxygen mixture in its management. *Journal of Laryngology and Otology 1990*; **104**: 654–655.

Further to this article in the August edition of The Journal we have used nebulized adrenaline for diagnostic purposes.

A 71-year-old female patient underwent a laparotomy for a severe haematemesis with oversewing of a large duodenal ulcer and pyloroplasty. She was electively ventilated for 36 hours. Her gastric bleeding continued necessitating a Polya gastrectomy on day 10. She was ventilated post-operatively and extubated on the morning of the third day.

During that afternoon the patient became tachypnoeic (45/min) with an inspiratory and expiratory stridor and intercostal recession. The larynx could not be visualized at indirect laryngoscopy.

Some degree of laryngotracheal oedema was assumed, so the patient was treated empirically with nebulized adrenaline (1ml of 1:1000 in 2ml of normal saline) over 15 minutes. There was no improvement in her stridor.

At direct laryngoscopy, a white amorphous mass was seen arising posteriorly from immediately beneath the glottis and removed intact. Post-operatively, the stridor had resolved.

Histology showed a  $20 \times 8 \times 6$  mm fibrinous mass arising from a contact ulcer. A post-intubation laryngeal granuloma usually arises from a contact ulcer weeks to months later whilst an acute granuloma occurs rarely (Blanc and Tremblay, 1974) and was, therefore, unlikely in this case. In view of the overall severity of the patient's illness nebulized adrenaline had a rapid therapeutic potential and was useful diagnostically in determining that direct laryncoscopy was indeed required. Yours faithfully

J R Livesey, M.A., F.R.C.S.Ed. Senior House Officer in Otolaryngology, W F de Mello, B.Sc., F.C.Anaes., D.R.C.O.G., Senior Registrar in Anaesthetics, Royal Surrey County Hospital,

Guildford,

Surrey GU2 5XX.

#### References

- Blanc, V. F., Tremblay, N. A. G. (1974) The complications of tracheal intubation: a new classification with a review of the literature. *Anaesthesia and Analgesia*, 53: 202–213.
- Solomons, N. B., Livesey, J. R. (1990) Acute upper airway obstruction following Teflon injection of a vocal cord; the value of nebulized adrenaline and a helium/oxygen mixture in its management. *Journal of Laryngology and Otology*, 104: 654-655.

# Multiple Submucosal Out-Fractures of Inferior Turbinates

### Dear Sir,

I read with interest the paper Multiple Submucosal Outfractures of the Inferior turbinates (MOFIT), (Journal of Laryngology and Otology, 1990, **104**: 239–240, March) written by O'Flynn, *et al*.

While I congratulate them for formerly describing this operation, I think it is important to make the following observations:

- a. that Multiple Submusocal Out-fractures of the inferior turbinates is not just an alternative procedure to other surgical procedures to the inferior turbinate as the authors appear to suggest.
- b. that there should be a proper indication for this operation as the authors failed to clearly state this.

Hypertrophy of the inferior turbinate is either mucosal or bony. Mucosal hypertrophy can be compensatory, allergic or vasomotor. In these instances, submucosal diathermy to the inferior (SMD) or linear diathermy to the inferior turbinate (LDIT) or cryosurgery of the inferior turbinate (CIT) are more likely to be effective. There may be the need to trim the turbinate in the case of marked mucosal hypertrophy.

In the instance of bony hypertrophy however, there is usually a thin layer of mucosa overlying the bony turbinate. SMD, LDIT or CIT in this instance is less likely to be effective. It is in this instance that I have carried out MOFIT and suggest that this is the situation when MOFIT is properly indicated.

Yours faithfully,

J. Y. Osammor F.R.C.S. Department of E.N.T. Surgery Fulwood Hospital, Preston, Lancs.

## Author's reply

Dear Sir,

There may be more than one mechanism by which MOFIT works:

- i) simple mechanical lateralisation of the turbinate
- ii) disruption of the submucosal blood plexus which occurs during mucosal elevation,

iii) scarring and fibrosis related to the multiple factures. The relative importance of each of these and other possible mechanisms is not clear. Further studies are underway. However, this simple procedure appears to be effective and safe in many 'bony' and 'mucosal' cases. Yours sincerely,

Paul O'Flynn, F.R.C.S.,

Department of E.N.T. Surgery,

Derby Royal Infirmary,

London Road, Derby.