

## Letter to Editor

### Acute airway obstruction secondary to ACE inhibitors: a growing concern

Dear Sir

We would like to bring this life threatening, and we feel under-reported and unrecognized, association to the attention of your readers.

There has been an increase in use of angiotensin converting enzyme inhibitors (ACE-I) in recent years, and in 2000, there were 1 425 122 prescriptions dispensed.<sup>1</sup> It is known from previous work that ACE-I therapy rarely causes angioneurotic oedema. The stated incidence is 0.1–0.3 per cent of those receiving the drug.<sup>2</sup> It is important to recognize this side-effect due to its life-threatening nature and tendency to recur if ACE-I therapy is continued.

In the 24-month period, January 2001–2003, five patients with angioneurotic oedema, secondary to ACE-I therapy, presented to our large district general hospital (population served 500 000), three out of five required intubation and two went on to have a tracheostomy.

There is no clear relationship between length of therapy and the onset of angioneurotic oedema.<sup>3</sup> It is this variability in presentation which may mislead the physician and make the diagnosis obscure.

We contacted the 'Committee on Safety of Medicines' to report the five cases that presented to us in the two-year period studied. It was interesting to note that, previously, only seven other cases had been reported to them in the UK, despite widespread usage of the drug for 20 years. It seems likely then that the condition has either been underestimated, under-reported or has gone unrecognized here.

The speed of onset of symptoms and often relentless progression despite emergency drug treatment necessitates prompt decision about the management of the airway. The frequent involvement of the tongue results in a difficult intubation not to be attempted by a junior anaesthetist. A senior anaesthetist capable of fibre-optic intubation and an experienced ENT surgeon should be contacted immediately.

As the number of patients on ACE-Is increases, more will present with angioneurotic oedema leading to upper airway obstruction. A brief survey in our hospital showed that in the same 24-month period, only 14 urgent tracheostomies were performed by the ENT department,

most of which were performed in a semi-elective situation in operating theatres when percutaneous tracheostomy was felt unsafe. However, 99 tracheostomies were performed percutaneously by anaesthetists on the intensive care unit, in the same period. This relative lack of experience, in performing tracheostomies, of ENT Registrars has major implications for training and patient safety. Especially given that the few tracheostomies that are performed by the ENT department are often in emergency situations, complicated by being on the ward or ITU in difficult conditions.

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