

# First aid treatment of epistaxis – are the patients well informed?

J A Lavy, C B Koay

**Abstract**

**Objective**—To investigate the level of lay knowledge of first aid measures for epistaxis, and to determine the effectiveness of an ENT department policy of providing an advice sheet of first aid measures.

**Methods**—50 patients presenting with epistaxis were questioned on the accuracy and level of their knowledge of the four basic procedures used to combat a nose-bleed. The results were correlated with the source of referral, previous treatment, and advice.

**Results**—A large proportion of patients who had previously been treated for epistaxis by their general practitioners and other non-ENT trained medical or nursing staff were unable to recall being given any first aid advice. For those who remembered being given advice, very few described all the steps correctly. In contrast, patients who had previously been seen by the ENT staff scored full points in every aspect.

**Conclusions**—The results are a reflection of the departmental policy of supplying information sheets outlining the first aid measures to all patients presenting with epistaxis.

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Key terms: epistaxis; first aid

Epistaxis is mentioned in medical writing dating back to the fifth century BC, when Hippocrates described pressure on the alae nasi as an effective way of controlling nose-bleeds, although in some cases he reverted to nasal packing and application of a cold fomentation to the shaved scalp.<sup>1</sup> Up to 70% of people will suffer from epistaxis at some stage in their life.<sup>2</sup> It is one of the commonest ENT emergencies presenting to general practitioners, accident and emergency (A&E), and ENT departments. The severity of symptoms can vary from being a nuisance to being life threatening.

Despite the prevalence of epistaxis, the first aid procedures for dealing with it are surprisingly poorly known. These procedures can be found in any good medical or nursing textbook<sup>2-3</sup> and can be summarised into four basic elements (fig 1):

- (1) Position – sitting and leaning forward
- (2) Pressure – applied to the fleshy part of the nose (alae nasi)
- (3) Swallowing – breathing gently through mouth, avoiding swallowing any blood
- (4) Ice packs – applied to the bridge of the nose or back of the neck



The aim of our study was to investigate the level of knowledge of these first aid measures in patients presenting with epistaxis, and to determine the effectiveness of our own departmental policy of giving all patients presenting with epistaxis a printed advice sheet outlining the basic first aid measures.

**Methods**

Fifty consecutive patients presenting to the two authors in the ENT department with epistaxis, either routinely or as emergencies, were asked a series of questions inquiring into the source of their referral, previous treatment and advice, and knowledge of the basic four first aid principles.

**Results**

Figure 2 illustrates the number of patients referred from each different source and also the proportion, as far as the patients' recollection is concerned, given first aid advice at the primary referral source or from previous treatment. It can be seen that for general

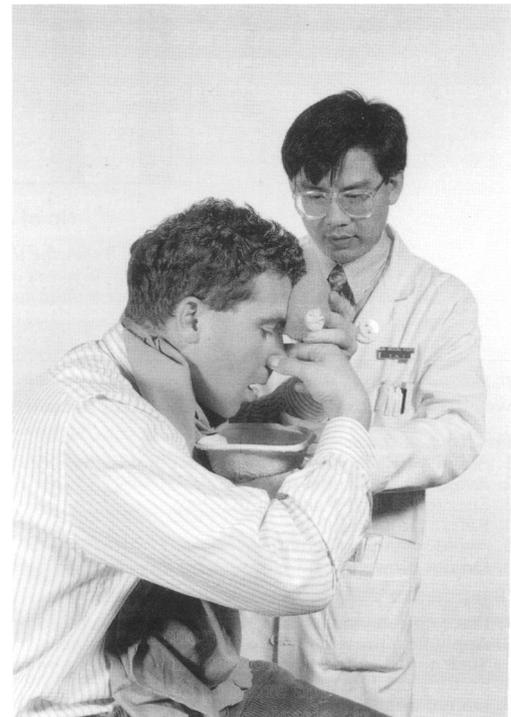


Figure 1 Photograph showing the four basic elements in the first aid treatment of epistaxis: (1) sitting and leaning forward, (2) pressure applied to the alae nasi, (3) breathing through mouth with a bowl to catch the drips, and (4) ice packs.

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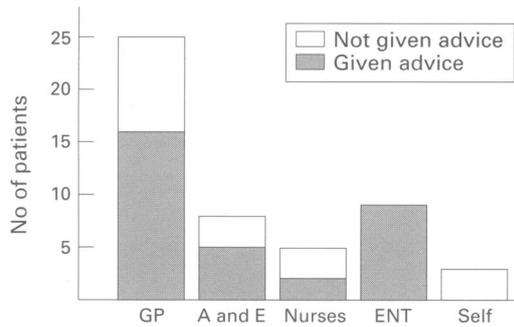


Figure 2 The number of patients and source of referral/previous treatment.

practitioners and A&E doctors just over 60% of patients reported being given advice. This figure is lower (40%) for those referred by nursing staff, but 100% of those previously seen in the ENT department remembered being given first aid information.

Figure 3 shows a clear relation between the numbers of patients given advice and their ability to recall the first aid measures correctly. Of those 11 patients able to recount all four measures, nine had previously been seen in the ENT department.

**Discussion**

The first aid procedures for stopping a nose-bleed can be found in any good nursing or medical textbook. But recall of these procedures, even among those given verbal advice on previous occasions, is low.

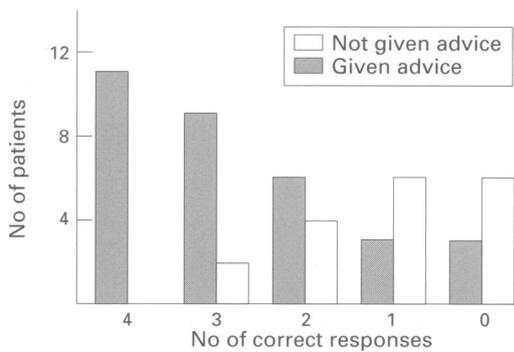


Figure 3 Graph showing the inverse relation between number of correct responses and the number of patients who were given advice v those not given advice.

**Following an Epistaxis (Nose Bleed)**

We offer the following advice to help prevent a recurrence.

For about one week –

1. Avoid VERY hot drinks and VERY hot baths.
2. Avoid trauma to the nose.
3. Sneeze through your mouth.
4. Refrain from smoking.
5. Avoid strenuous activities.
6. Do not blow your nose or pick off any crusts.

In the event of a recurrence –

1. Place cotton wool or a tissue just inside the bleeding nostril.
2. Apply firm pressure to the fleshy part of the nose.
3. Suck an ice cube or apply an ice pack between your eyes.
4. Sit forward with a bowl under your nose.
5. Do not swallow blood – spit it into the bowl.
6. Using a clock time yourself, continue applying pressure for 5 to 10 minutes.

If you are unable to control the bleeding, ring your doctor or go to a casualty department.

Figure 4 The epistaxis advice sheet.

**Position** – Many patients stated that one should lie down or lean back rather than assume the correct position, which is to sit forward with a bowl held under the nose to catch any drips. This allows excess blood to drip out through the nostrils and also from the mouth. This has the benefit of allowing the medical attendant to assess the amount of blood loss and also reduce the amount of blood which may collect in the oropharynx inducing the urge to swallow. Not only will the swallowed blood conceal the actual degree of bleeding but it will also act as an irritant to the stomach, causing haematemesis and occasionally malaena.

**Nose pinch** – That pressure should be applied to the nose was almost universal knowledge. However, a large number of patients indicated that the pressure should be applied to the bridge of the nose. We were surprised to find that quite a number of the patients had been misled by their medical attendant into believing this was the correct practice. Pressure should of course be applied to the fleshy part of the nose, thus tamponading Little’s area – the most common site of epistaxis.

**Swallowing** – A large proportion of patients replied that they swallowed any blood that trickled down their throat, whereas traditional teaching says that the patient should breathe through his mouth, thus creating a closed space within the nose – and any blood that escapes posteriorly should be expectorated. As has been outlined above, this will help to identify any ongoing blood loss, as well as prevent the unpleasant side effects from swallowed blood.

**Ice packs** – Few patients mentioned ice packs unprompted. However, once the subject was brought up most patients felt ice packs were a good idea. The traditional site for applying an ice pack is the bridge of the nose.

Although 47 of the 50 patients we surveyed had been attended by a doctor or a nurse concerning this or a previous epistaxis, nearly one third of them were unable to recall being given any advice on how they should deal with their nosebleed. The general level of knowledge of the first aid procedures for treating an epistaxis among those patients who were not given advice was low, with none of this group of patients managing to list all four procedures correctly. The majority (80%) of those who scored all four correct responses were made up of those who had previously been seen in the ENT department. Of the 16 patients given advice by their general practitioner, only one could correctly recall all four first aid measures.

We feel that the main reason for the accurate recall of those previously seen in the ENT department was the fact that, as well as explaining fully the correct first aid procedures, we provide a printed sheet outlining how to deal with a subsequent bleed (fig 4). By this means, the patients have the opportunity of going through the advice again after going home and may refer to the sheet again when dealing with a subsequent bleed. The knowledge may, of course, also come in useful when helping relatives or friends with epistaxis.

## CONCLUSION

With more widespread knowledge of the first aid measures for combating epistaxis the morbidity of this very common problem could be reduced. Provision of such advice, however, is only as effective as the patient's ability to recall it. We feel that supplying patients with information sheets as outlined above improves the rate of recall. Indeed, a strong case could be made for making such leaflets widely available in GP surgeries. The number of out

of hours calls for both general practitioners, A&E doctors, and junior ENT staff could in this simple way be reduced without compromising patient care.

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- 2 Murray JAM: Epistaxis. In: Maran AGD, ed. *Logan Turner's Diseases of the ear, throat and nose*, 10th ed. Bristol: John Wright, 1988:30.
- 3 Brunner LS, Suddarth DS, eds *Textbook of medical-surgical nursing*, 4th ed. Philadelphia: Lippincott, 1987.

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