Nosebleeds – The Importance of Taking a History

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SUMMARY: Nosebleeds are exceedingly common, and usually idiopathic. Cautery under local anaesthetic to the vessels of the nasal septum is often used successfully as a treatment for the recurrent condition. However, rarely, a nosebleed may be a symptom of a more serious underlying disorder and a suitable history and examination are required.

Introduction

Epistaxis is a common condition, the majority of cases never reaching the attention of the medical profession. For those who present with bleeding that has not responded to simple digital pressure, control is usually achieved by a nasal pack which is removed after twenty four hours. Persistent bleeding from friable vessels at the anterior end of the nasal septum (Little's area) can be prevented by application of chemical or electrical cautery, though care must be taken as over-enthusiastic use of the cautery can result in necrosis of the septum and the development of a perforation (Fig 1).

Patients

The following cases seen over a twelve month period at the Ear, Nose and Throat Department of the British Military Hospital Rinteln illustrate some of the problems that may present with a seemingly simple nosebleed.

1. A twenty-five year old man was referred with an epistaxis of several hours duration which could not be controlled, despite the use of adrenaline soaked packs. He had a history of nose bleeds from the age of about ten, bruised easily and found that shaving cuts could bleed for up to an hour. At the age of eight he underwent adenoidectomy and bled excessively afterwards. There was no relevant family history and he did not regularly take aspirin or any other drug. His nose had been cauterised excessively – his estimate was about twenty separate times – and this had left him with a perforation of the nasal septum (Fig 1). A full blood count, including platelet count and morphology, was within normal limits. Prothrombin time (PT) and Kaolin cephalin time (KCCT) were both normal. In view of the history he was referred for specialist haematological advice. Platelet aggregation studies suggest this man suffers from thrombasthenia (Glanzmann's Disease). He has been advised never to take aspirin, as this would further impair platelet activity(1). To date he has not had any further serious problems other than occasional slight

Fig 1. Nasal septal perforation following cautery.

bleeding from the margins of the nasal septal perforation, a recognised complication of this condition.

2. A twenty-eight year old woman presented with epistaxis, controlled only with some difficulty by nasal packing. There was no relevant past medical history and she was not taking any medication. She was noted to have petechiae and thrombocytopenia was suspected. Her platelet count was $8 \times 10^9/l$. She was referred to a haematologist. After a bone-marrow aspirate the diagnosis of autoimmune thrombocytopenia was made and treatment with steroids was commenced. In this case the combination of abnormal physical findings and simple laboratory investigations showed that something more serious than a simple nosebleed was present and prompt appropriate referral could be made.

3. A six year old girl was referred on four separate occasions with recurrent nose bleeds. She had cautery to the nasal septum performed several times under local anaesthesia. On closer questioning it was found that she bruised easily and when a tooth fell out she bled for 24 hours. She has one brother, aged eight, who bruises

prolonged by anticoagulants such as warfarin. The KCCT measures the internal pathway and is prolonged from its normal value of 37–45 seconds by heparin. The bleeding time is measured by applying a tourniquet to a pressure of 40mm mercury and making two incisions in the skin with a special apparatus. The cuts are blotted at 30 second intervals and the time taken for haemostasis measured. No aspirin should be taken for seven days beforehand as this interferes with platelet function.

Conclusion

Haematological disorders can present in a variety of ways to a variety of clinicians, so an understanding and awareness of these conditions is important. This is especially the case in hospitals where specialist haematologist advice "on site" is limited. Adequate preliminary investigations can sometimes clarify the problem, making the process and priority of referral easier. The limitations of these tests should be understood.

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REFERENCES

1. SUTOR A H, BOWIE E J, OWEN C A. Effect of Aspirin, Sodium Salicylate & Acetomorphin on Bleeding. *Mayo Clin Proc* 1971; **46**: 178–181.
2. BLOMBÄCK M, JOHANSSON G, JOHANSSON H, SWEDENBORG J, WABO E. Surgery in Patients with von Willebrand's Disease. *Br J Surg* 1989; **76**: 398–400.
3. KERR A G. Scott Brown's Textbook on Otolaryngology. London: Butterworths, 1987.
4. MARAN A G D, STELL P M. Clinical Otolaryngology. London: Blackwell Scientific Publications 1979.
5. PRENTICE A G, BRADFORD C R, COPPLESTONE J A. Control of Haemostasis. *Br J Hosp Med* 1990; **43**: 385–389. Reproduced with permission.