

Young's procedure in the treatment of epistaxis

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Abstract

Intractable epistaxis associated with septal perforation is a difficult problem to treat, particularly if nose-picking appears to be associated. Two such cases are presented in which Young's procedure of nasal closure was used to prevent epistaxis. Although the procedure was fully successful in only one patient, we feel the procedure has a part to play in the management of such cases of epistaxis.

Introduction

Young's procedure for nasal closure is a recognized treatment for chronic atrophic rhinitis. Young (1967). Complete closures can be reopened eventually, with good result and in some cases partial openings remain as a satisfactory result (Shah *et al.*, 1974; Sinha *et al.*, 1977). Several indications for this procedure have been described, but we can find no reference to its use in epistaxis.

We present two cases where the procedure was used to treat intractable epistaxis with large septal perforations, with different outcomes.

Case 1

A 14-year-old girl initially presented in 1971 with a granular, bleeding mass on the left nasal septum. Investigations for systemic disease were negative and biopsy showed non-specific chronic ulceration, but she admitted to nose picking. Despite this she underwent a short course of radiotherapy on the assumption that she had a non-healing granuloma. This resulted in a perforation, although the edges healed. For the next ten years she had recurrent bouts of epistaxis and persistent nasal pain.

When she was aged 25 years, an attempt was made at closure of the perforation with a 'Plastipore' septal button. This did not help her symptoms, so seven months later the button was removed and repair attempted with homograft dura. Nasal splints were inserted and left *in situ* for seven months to prevent digital interference. On removal of the splints, the graft was found to have failed.

In 1984, a bilateral Young's procedure was performed. Neither vestibule healed and both were found to be disrupted after two weeks. A further attempt at nasal closure in 1986 had a similar outcome. At present, she still has a perforation but her symptoms of epistaxis have settled.

Case 2

Another 14-year-old girl initially presented, in 1979, with nasal obstruction and allergic symptoms. She had submucous diathermy to her inferior turbinates. Three years later she returned with nasal obstruction and epistaxis. She was treated with silver nitrate cautery. In the following six months, she had cautery on three further occasions. Soon after the last cautery she developed a very granular ulcer on the septum. This was

biopsied on three occasions in four months with reports of florid granulation tissue, although one report raised the possibility of trauma as the cause. A large septal perforation with granular edges developed and the advice of a haematologist and an immunologist was sought to rule out the possibility of Wegener's granuloma or haematological malignancy. Investigation only revealed a marked allergy to house dust mite. During this admission she continued to have epistaxis and, although nose picking was strongly suspected, it was never proved. Attempted closure of the perforation six months later with a turbinate pedicle was unsuccessful. She continued to have recurrent severe epistaxis requiring blood transfusion on several occasions, and one year later a bilateral Young's procedure was carried out in an attempt to prevent nose picking. The left-sided closure broke down soon afterwards and required further surgery, but both sides eventually healed satisfactorily. She has now been asymptomatic for five years. Both nostrils remain closed and the patient is content with the result.

Discussion

The patients described have a familiar problem which is dishearteningly difficult to treat. It is likely that nose picking played a part in the development and subsequent progress of the condition in both cases. It also appeared that the first patient caused the breakdown of both attempts at nasal closure by nose picking and interference with the suture line.

'Nose picking' as a cause of persistent epistaxis is well established, but it may be difficult to prove. The patient often denies such behaviour and may in fact be unaware of it. Some patients appear to nose pick in their sleep, and may be awakened by bleeding. In the majority of cases the diagnosis is assumed. Periods of observation are usually fruitless or only provide circumstantial evidence of nose picking. Likewise, treatment of the condition is frustrating with little to offer but advice and encouragement. Treatment of conditions causing nasal itching may reduce the problem, as may the wearing of gloves at night.

Young's procedure was used in these two cases in an attempt to prevent nose picking. Although it was successful in only one case, it appeared to be well tolerated by that patient who much preferred the resulting obstruction to the epistaxis.

We suggest that Young's procedure should be considered in certain patients with chronic epistaxis.

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