

Management of epistaxis

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Anterior bleeding from Kiesselbach's plexus may be controlled by silver nitrate cautery under local anaesthesia. Even in more posterior epistaxis, the bleeding point can often be identified using rigid nasendoscopy and controlled with the use of a topical vasoconstrictor, and then dealt with directly using electrocautery. However, posterior bleeding, as seen in the Sir William Osler, 1849–1919, Professor of Medicine, successively at McGill University, Montreal, Canada, University of Pennsylvania, Philadelphia, PA, and Johns Hopkins University, Baltimore, MD, USA, finally becoming Regius Professor of Medicine at Oxford University, Oxford. Colin B Holman, 1917–2008, American radiologist, Mayo Clinic. W Eugene Miller, American radiologist, Mayo Clinic, with Colin Holman described the eponymous sign on plain radiographs in 1965. Erik Adolf von Willebrand, 1870–1949, physician, Diakonissanstaltens Hospital, Helsinki, (Helsingfors), Finland, described hereditary pseudohaemophilia in 1926. impregnated ribbon gauze or a non-absorbable sponge. There are also many haemostatic, absorbable materials that can be used to pack the nose to help control bleeding. An alternative to anterior packing is the use of an inflatable epistaxis balloon catheter (Figure 51.46). The catheter is passed into the nose and the distal balloon is inflated in the nasopharynx to secure it. The proximal balloon, which is sausage shaped, is then inflated within the nasal fossa to compress the bleeding point. Although usually effective, they can be uncomfortable. Postnasal packing may be required in refractory cases whereby a gauze pack is positioned in the nasopharynx under general anaesthesia. Endoscopic sphenopalatine artery clipping is an effective treatment for significant epistaxis not responding to direct cautery or nasal packing. For uncontrolled life-threatening epistaxis in which the above methods have proved ineffective, haemostasis is secured by vascular ligation. Depending on the origin of bleeding it may be necessary to ligate the internal maxillary artery in the pterygopalatine fossa (which can be accessed endoscopically) and the anterior and posterior ethmoidal arteries. An alternative measure is external carotid artery ligation above the origin of the lingual artery. Another option is to involve the interventional radiologist for possible embolisation. It is also important to recognise, and treat, any factors contributing to the epistaxis, such as clotting or platelet abnormalities. d, UK, in 1904.

Figure 51.44 Hereditary haemorrhagic telangiectasia (Osler's disease) showing multiple telangiectasia.

In HHT, anterior nasal packing is best avoided if at all possible because it is most likely to lead to further mucosal trauma and bleeding. High-dose oestrogen induces squamous metaplasia of the nasal mucosa and has been used effectively in treating this condition. Medications that block vessel growth, such as bevacizumab, and those that slow the disintegration of clots, such as tranexamic acid, help reduce the bleeding associated with HHT. There are also surgical options, including cautery/ablation of the telangiectasia, septodermoplasty or surgical closure of the nostril (Young's procedure).

Figure 51.45 Endoscopic resection of juvenile angiofibroma using image guidance (merged computed tomography and magnetic resonance imaging scans). Figure 51.46 Epistaxis balloon catheter.

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