Summary

Epistaxis still remains one of the common ENT emergencies. Epistaxis can be fatal, thus the urgency in management and the use of surgical modalities in persistent epistaxis.

The nasal cavity receives blood supply from both external carotid and internal carotid artery. The anterior and posterior ethmoidal artery from internal carotid and branches from sphenopalatine artery from external carotid artery have numerous anastomosis and form a rich vascular plexus in the submucosal region.

The etiology of epistaxis varies. Although the majority of epistaxis is of idiopathic origin, the other common causes are malignancies e.g. nasopharyngeal carcinoma, post-trauma and secondary to coagulopathies and hypertension.

Nasal bleeding is divided into anterior and posterior epistaxis. Anterior epistaxis in most cases originates from anterior nasal septum and is usually self-limited. Posterior epistaxis is more complicated, and the conservative treatments include posterior packing and inflated balloon compression. These methods may cause patient discomfort, even hypoxia or cardiac arrhythmia. Furthermore, epistaxis sometimes so intractable that invasive interventions, such as microscopic or endoscopic cautery, arterial ligation and angiographic embolization, are indicated.

Selective embolization is the most expensive initial treatment, and it has the highest complication rate (50%). In addition, embolization is a procedure requiring a highly skilled neuronadiologist and may not be available at all hospitals.

Endoscopic S.P.A ligation- which is now the most common method used to control posterior epistaxis- has a relatively high recurrence rate (10%) due to anatomical variations of vascular supply of the lateral nasal wall.

Endoscopic I.M.A ligation in P.P.F. i.e. lateral to S.P.F and it’s terminal branches (S.P.A, D.P.A.) avoids the high recurrence rate. The success rate of I.M.A ligation is more than 95%.

The recurrence may be due to slipping of a clip or cross circulation from the other side if the non dominant maxillary artery was clipped.