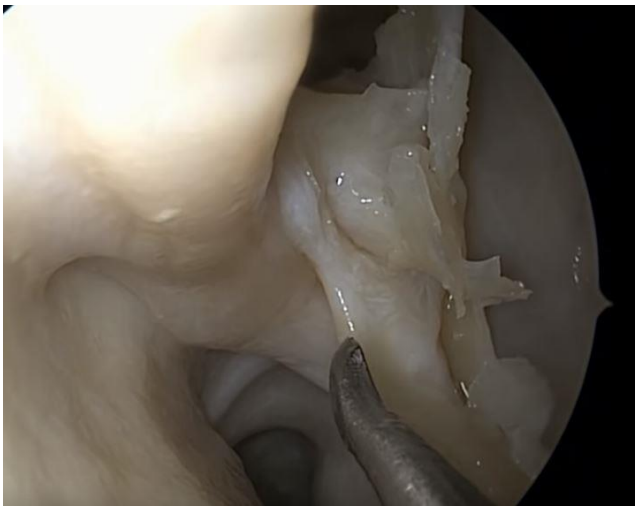

# TESPAL

Transnasal endoscopic sphenopalatine artery ligation

ABSTRACT

This procedure was first reported by Budrovich and Saetti in 1992.This procedure can safely be performed under GA. / L.A.  This is a safe procedure and can be performed under local anesthesia also

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Otolaryngology online

# TESPAL

# (Trans nasal endoscopic sphenopalatine artery ligation)

Prof. Dr Balasubramanian Thiagarajan

**History:**

This procedure was first reported by Budrovich and Saetti in 1992.

This procedure can safely be performed under GA. / L.A.

**Indication:**

Epistaxis not responding to conventional conservative management.

Posterior epistaxis

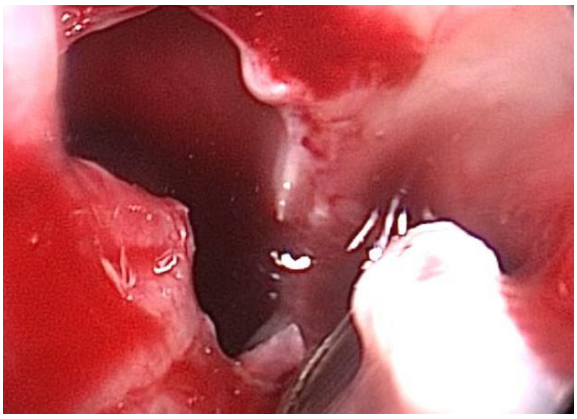
**Procedure:**

The nose should first be adequately decongested topically using 4% xylocaine mixed with 1 in 50,000 units adrenaline.

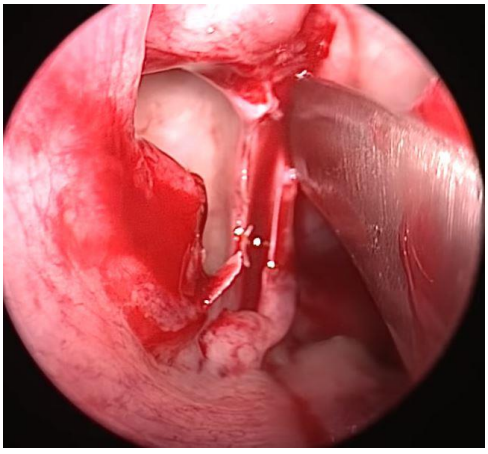
A 4mm 0 degree nasal endoscope is introduced into the nasal cavity. The posterior portion of the middle turbinate is visualized. 2% xylocaine with 1 in 1lakh units adrenaline is injected in to this area to further reduce bleeding.

**Incision:**

An incision ranging between 10 - 20 mm is made vertically about 5 mm anterior to the attachment of the middle turbinate. The mucosal flap is gently retracted posteriorly till the crista ethmoidalis is visualized. The crista ethmoidalis is a reliable land mark for the sphenopalatine artery. The artery enters the nose just posterior to the crista. The crista can in fact be removed using a Kerrison's punch for better visualization of the artery.



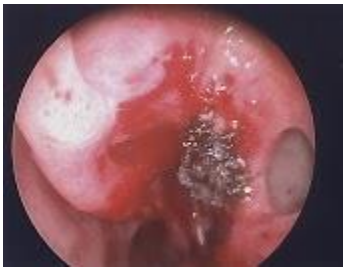
Posterior fontanelle seen being widened



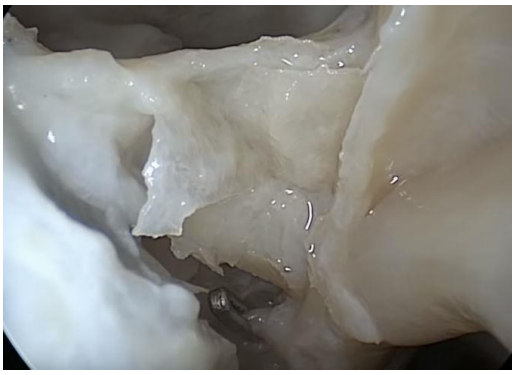
Crista ethmoidalis being visualized

The sphenopalatine artery is clipped using liga clip or cauterized as it enters the nasal cavity. This is done as close to the lateral nasal wall as possible; this would ensure that the posterior branches may also be reliable included.

Following successful ligation / cauterization, the area is explored posteriorly for 2 - 3 mm to ensure that no more vessels remain uncauterized.



Bleeder cauterized



Liga clip seen being applied to sphenopalatine artery (This is done in a cadaver for training purposes and screen shot taken)

Nasal packing is not needed.

**Complications of TESPAL:**

1. Palatal numbness

2. Sinusitis

3. Decreased lacrimation

4. Septal perforation

5. Inferior turbinate necrosis

This procedure in combination with transnasal anterior ethmoidal artery ligation ensures that epistaxis is controlled reliably.