OBJECTIVE
To describe the anatomy of sphenopalatine foramen region on nose lateral wall and possible anatomical variations, during the surgical procedure under endoscopic visualization.

CASUISTICS AND METHODS:
The sphenopalatine foramen region of 122 nasal fossae – 75% males - was carefully dissected. Mixed race cadavers prevailed. Presence of ethmoidal crest of the perpendicular plate of the palatine bone, location of sphenopalatine and accessory foramen, and number of arterial branches emerging through foramen, were observed. Data were analyzed in relation to sex, color/race and laterality of the cadaver.

RESULTS:
Ethmoidal crest was present in 100% of cadavers, being anterior to the sphenopalatine foramen in 98.4% of times (Fig 1). The most frequent sphenopalatine foramen location was the transition region of middle and superior meatus (86.9%) (Fig 2, 3). Mean distance from sphenopalatine foramen and accessory foramen to anterior nasal spine was 6.6cm and 6.7cm, respectively (Fig 4). Accessory foramen was present in 9.83% of cases (Fig 1, 5). A single arterial stem emerged through the sphenopalatine foramen in 67.2% of times, and 100% through accessory foramen (Fig 1). Differences between nasal fossae were not statistically significant. There was no correlation between accessory foramen and variables studied.

DISCUSSION
The ethmoidal crest of the perpendicular plate of the palatine bone is an important anatomical repair to encounter the sphenopalatine foramen, and it is found in 100% of studied cases, being located anteriorly to the SPF, in most of the cases. Precise location of sphenopalatine foramen is ground for continuous debate and confusion in the literature. While some authors always place the foramen on the superior meatus region, others report that presence within a variation of 81.5% to 90% of the sphenopalatine foramen, and it is found in 100% of studied cases, being located anteriorly to the SPF, in most of the cases.

The anatomical basis of transantral ligation of the maxillary artery in severe epistaxis.


Vidian nerve surgery revisited.

REFERENCES