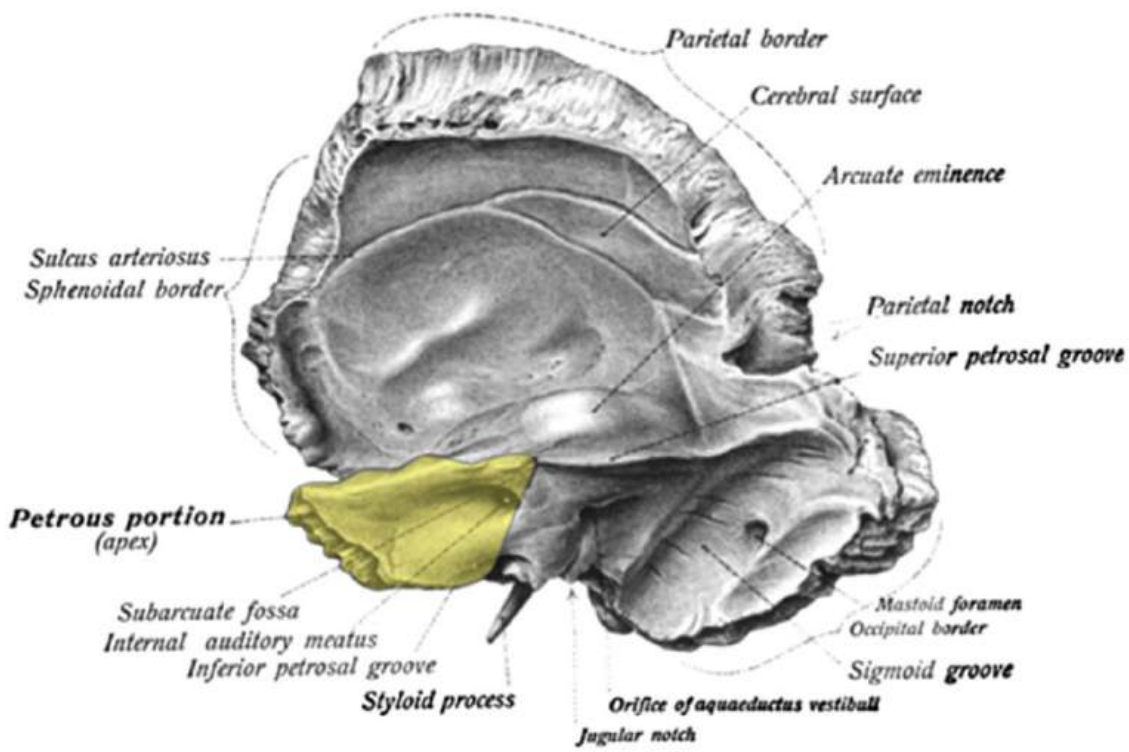


# Endoscopic approach to tumors of the petrous apex, 10 years of experience

Matías Gómez MD<sup>1,2</sup>, Ignacio Cifuentes MD<sup>1,2</sup>, Fernanda de Amesti MD<sup>1,2</sup>, Francisco Ringler MD<sup>1,2</sup>, Homero Sariego MD<sup>1,2</sup>, Katherine Walker MD<sup>1,2</sup>  
<sup>1</sup>University of Chile, <sup>2</sup>Instituto de Neurocirugía Dr. Asenjo

## Introduction

- Petrous apex is related to multiple structures which can be affected by the presence of tumors or by their surgical resection .
- Its surgical access is difficult and challenging
- We present the case series of patients diagnosed with tumors of the petrous apex, who underwent nasal endoscopic surgery

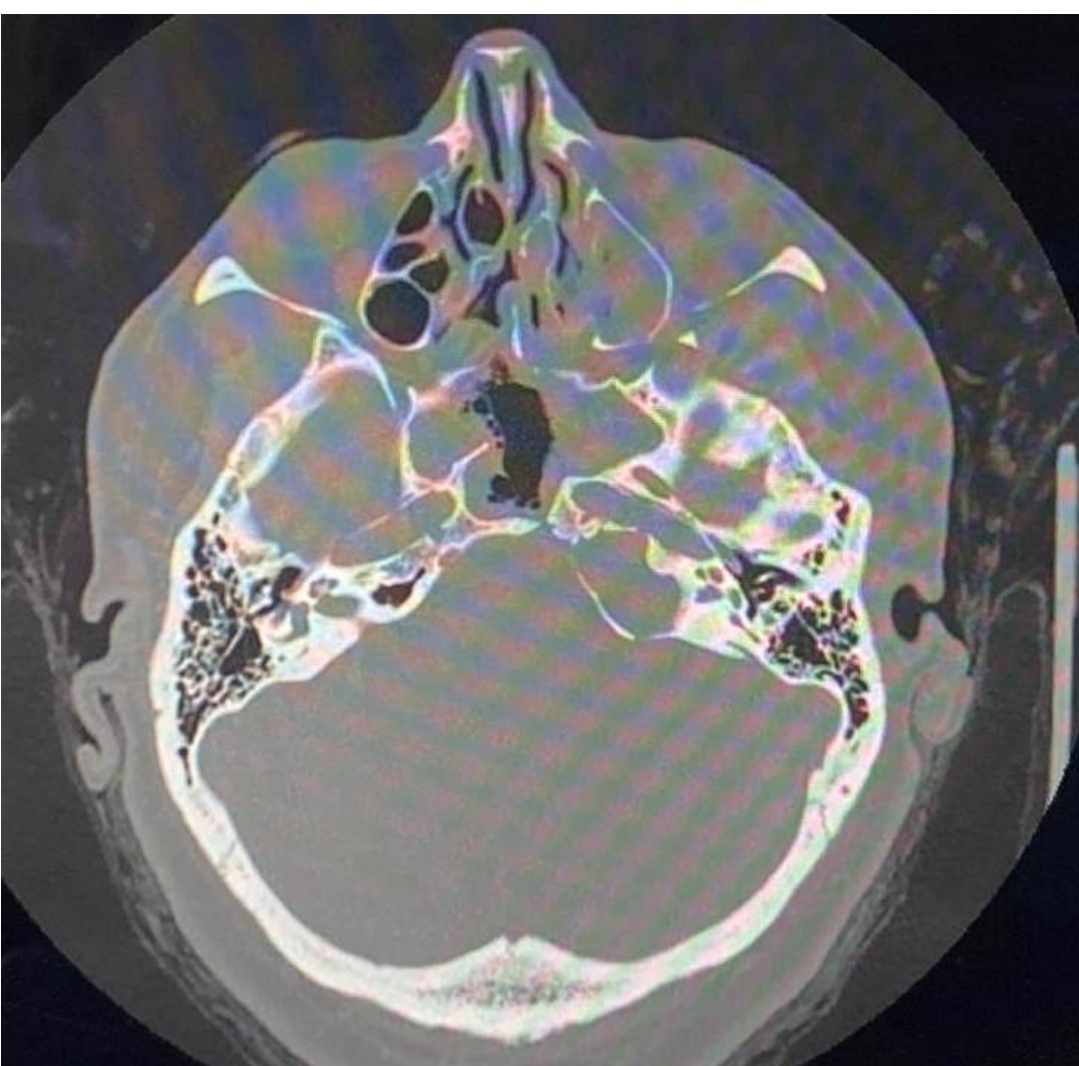


Epidemiological aspects	Nº of patients
Total	9 (100%)
Average age (years)	42.5 (7-73)
Male / female	4 (44%) / 5 (56%)

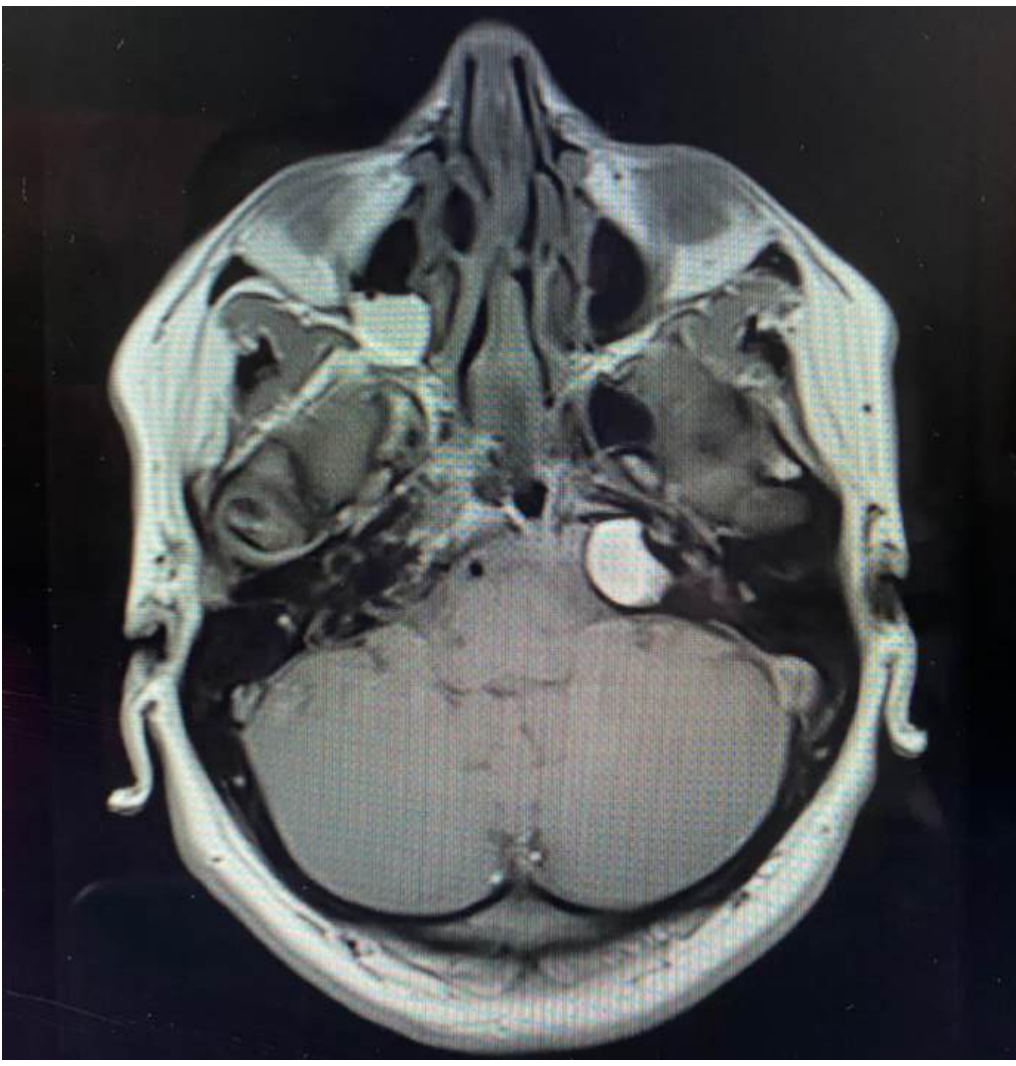
## Objectives

- Describe the management of patients who underwent endoscopic resolution for petrous apex tumors at INCA by the otolaryngology and/or neurosurgery team between 2013-2023.
  - Epidemiological aspects
  - Clinical manifestations
  - Surgical techniques
  - Results in terms of: complete resection rate, recurrence rate, postoperative discomfort and follow-up.

Clinical manifestation	Nº of patients
Headache	4 (44%)
Unilateral hearing loss	3 (33%)
Involvement of the sixth cranial nerve	2 (22%)
Facial palsy	2 (22%)
Incidental	4(44%)



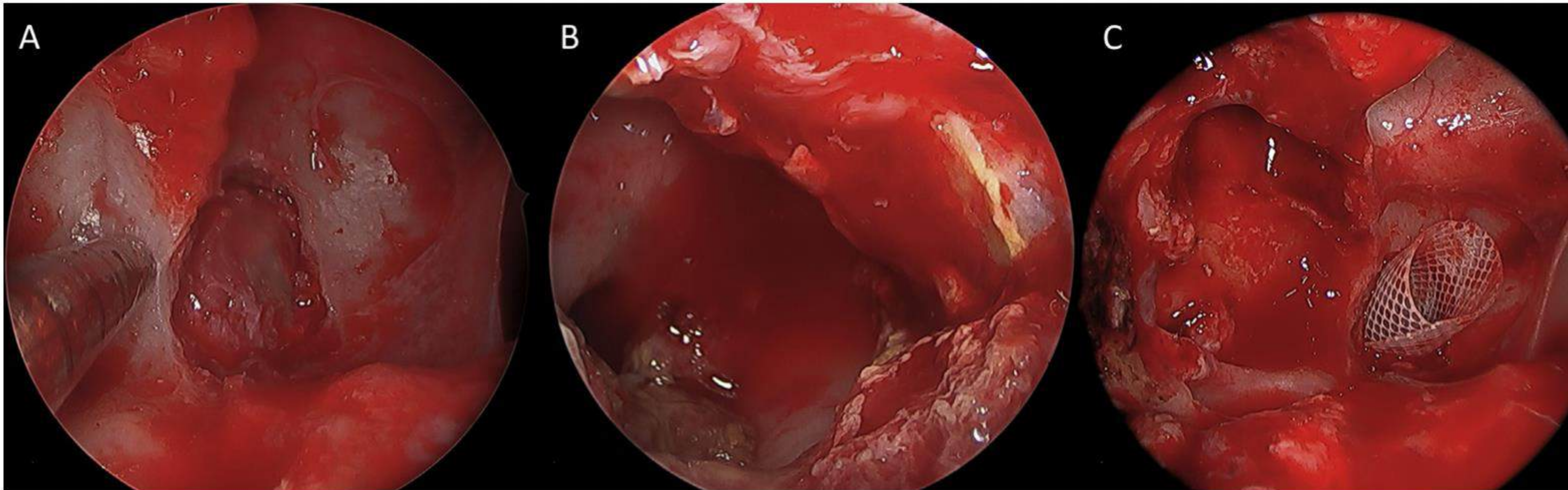
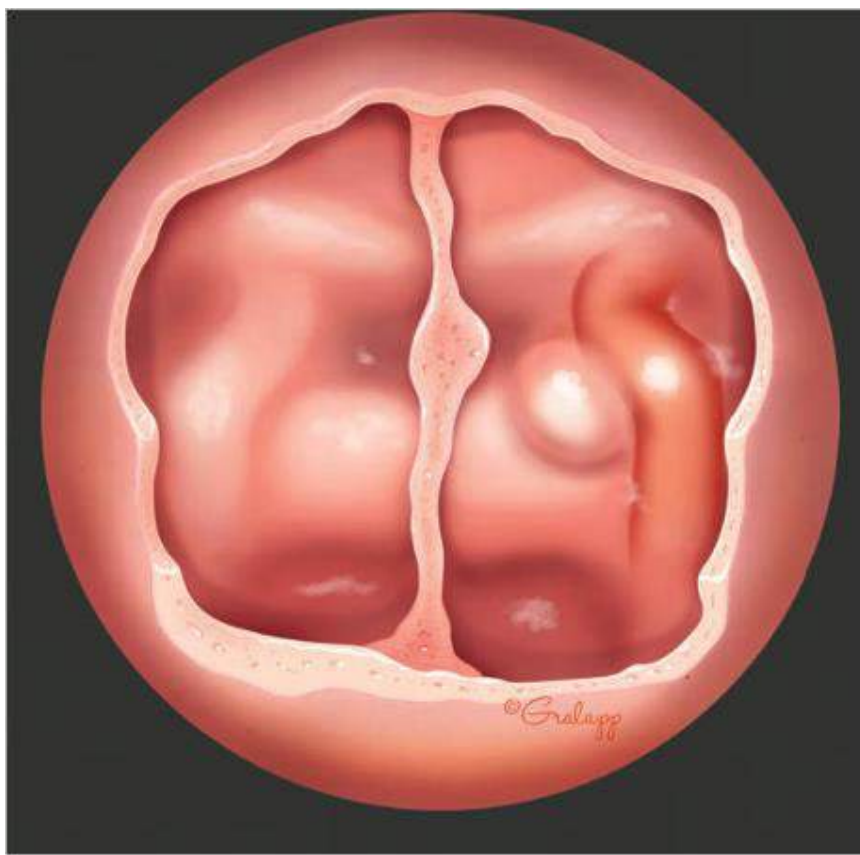
CT scan



MRI T1

## Surgical Technique

- In all 9 patients: endoscopic approach
- 8 (88%) transsphenoidal
- 1 (12%) transsphenoidal associated to transpterygoid
- In all cases: biopsy of the tumor



Transsphenoidal approach

Histological diagnosis	Nº of patients
Cholesterol granuloma	3 (33%)
Muocle of the petrous apex	1 (11%)
Cholesteatoma	1 (11%)
Chondrosarcoma	1 (11%)
Metastasis	1 (11%)
Langerhaans Histiocytosis	1 (11%)
Exocrine pancreatic tissue	1 (11%)

## Follow up

