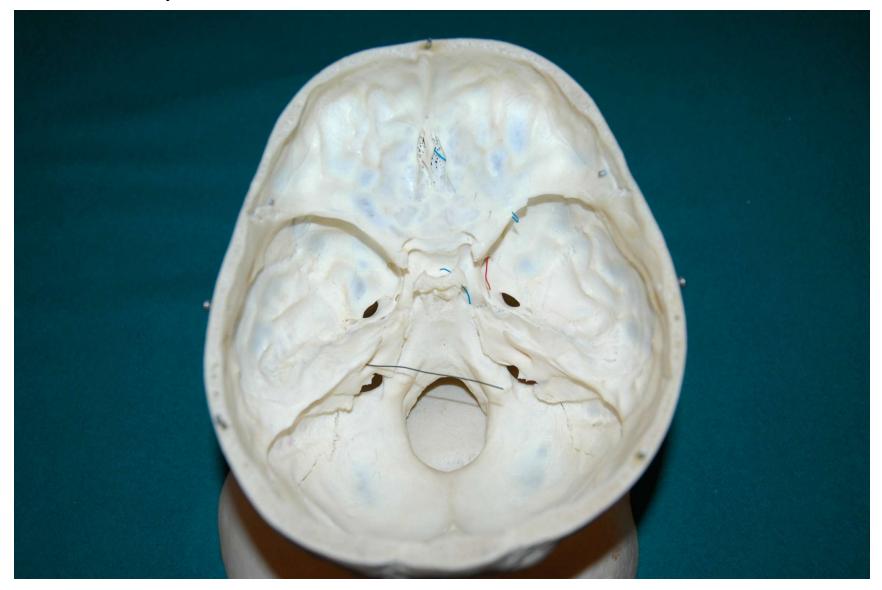
## 1a. Internal Auditory Meatus



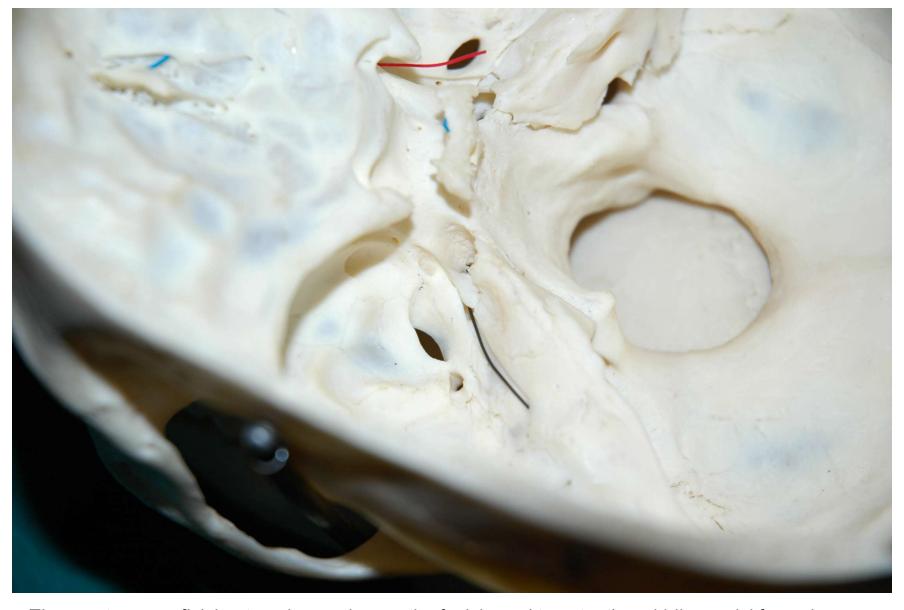
1. The facial nerve leaves the posterior cranial fossa to enter the facial canal by way of the internal auditory meatus (black wire). The facial canal is within the petrous part of the temporal bone.

1b. Internal Auditory Meatus



The facial nerve leaves the posterior cranial fossa to enter the facial canal by way of the internal auditory meatus (black wire).

## 2. Hiatus of the Canal and Groove for the Greater Superficial Petrosal Nerve



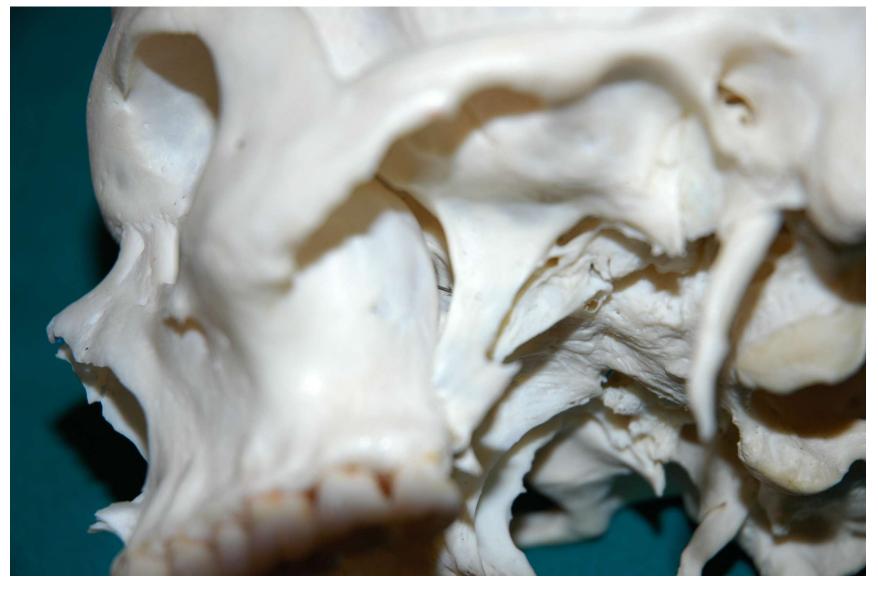
The greater superficial petrosal nerve leaves the facial canal to enter the middle cranial fossa by way of the hiatus of the canal for the greater superficial petrosal nerve (black wire).

#### 3. Pterygoid Canal at Anterior Lip of the Lacerate Foramen



The greater superficial petrosal nerve is joined by the deep petrosal nerve to form the nerve of the pterygoid canal (black and red wire). This nerve leaves the middle cranial fossa to enter the pterygopalatine fossa by way of the pterygoid canal. The posterior opening of the pterygoid canal is at the anterior lip of the lacerate foramen. The greater superficial nerve and the deep petrosal nerve travel within the cavernous sinus.

## 4. Pterygopalatine Fossa Seen Through the Pterygomaxillary Fissure



The anterior opening of the pterygoid canal is into the pterygopalatine fossa (black wire). The pterygopalatine fossa is located medial to the pterygomaxillary fissure and contains the pterygopalatine ganglion.

#### 5. External Auditory Meatus



The chorda tympani nerve leaves the facial canal and crosses the middle ear (black wire). It then leaves the middle ear to arrive in the infratemporal fossa by way of the petrotympanic fissure. This view shows the path of the chorda tympani within the middle ear (seen through external auditory meatus) and then entering the infratemporal fossa through the petrotympanic fissure.

## 6. Petrotympanic fissure



The chorda tympani branch of the facial nerve enters the infratemporal fossa by way of the petrotympanic fissure (black wire). Notice the close relationship to the mandibular fossa. The chorda tympanic is vulnerable to injury at this loccation.

# 7. Stylomastoid Foramen



The facial nerve leaves the facial canal to enter the parotid region by way of the stylomastoid foramen (black wire).