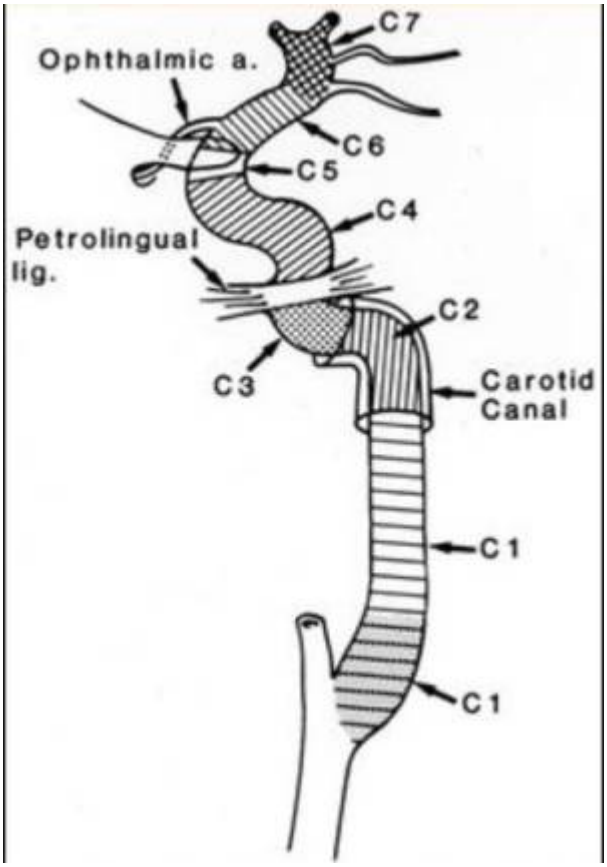
Internal carotid artery C2 segment



The petrous segment, or C2, of the internal carotid is that which is inside the petrous part of the temporal bone. This segment extends until the foramen lacerum. The petrous portion classically has three sections: an ascending, or vertical portion; the genu, or bend; and the horizontal portion.

When the internal carotid artery enters the canal in the petrous portion of the temporal bone, it first ascends a short distance and then curves anteriorly and medially. The artery lies at first in front of the cochlea and tympanic cavity; from the latter cavity it is separated by a thin, bony lamella, which is cribriform in the young subject, and often partly absorbed in old age. Farther forward it is separated from the trigeminal ganglion by a thin plate of bone, which forms the floor of the fossa for the ganglion and the roof of the horizontal portion of the canal. Frequently this bony plate is more or less deficient, and then the ganglion is separated from the artery by fibrous membrane. The artery is separated from the bony wall of the carotid canal by a prolongation of dura mater, and is surrounded by a number of small veins and by filaments of the carotid plexus, derived from the ascending branch of the superior cervical ganglion of the sympathetic trunk.

The named branches of the petrous segment of the internal carotid artery are:

the vidian artery or artery of the pterygoid canal the caroticotympanic artery

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C2 (petrous): still surrounded by postganglionic sympathetic nerves (PGSN). Ends at the posterior

edge of the foramen lacerum (f- Lac) (inferomedial to the edge of the Gasserian ganglion in Meckel's cave).

Three subdivisions:

a) vertical segment:ICA ascends then bends as the...

b) posterior loop:anterior to the cochlea, bends anteromedially becoming the...

c) horizontal segment: deep and medial to the greater and lesser superficial petrosal nerves, anterior to the tympanic membrane (TM)

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