

# Internal Jugular Vein

## *Internal jugular vein - course and tributaries*

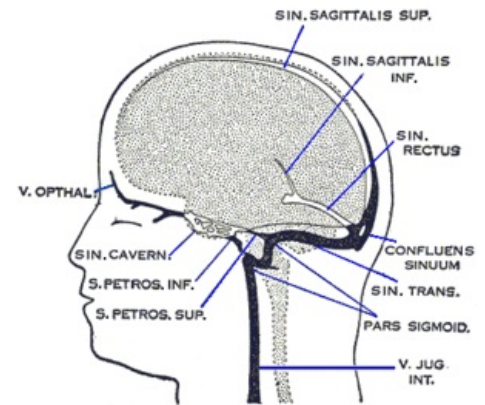
### Introduction

The internal jugular vein (IJV) originates within the cranial cavity, where it forms from the union of the sigmoid and inferior petrosal sinus. Its primary function is to collect blood from the brain, as well as from the superficial areas of the face and neck.

### Course

Upon exiting the skull through the jugular foramen, the initial part of the internal jugular vein is notably dilated, referred to as the superior bulb. As it courses through the neck, it descends within the carotid sheath, positioned deep to the sternocleidomastoid muscle and lateral to the common carotid artery.

At the base of the neck, posterior to the sternal end of the clavicle, the IJV merges with the subclavian vein to form the brachiocephalic vein. Just before this confluence, the inferior end of the internal jugular vein widens to form the inferior bulb, which features a valve preventing the backflow of blood.



course of IJV

### Syntopy

- I. Ant. rectus capitis lateralis
- II. Post. internal carotid artery and the nerves passing

Clinically, the internal jugular veins are vulnerable to damage due to their relatively superficial location, and injury to them can result in significant blood loss owing to the high volume of blood they transport.

### Tributaries

#### Intracranial tributaries

- 1.) Cerebral veins – (both superficial and deep)
- 2.) Meningeal veins – from cranial dura mater
- 3.) Dural venous sinuses – intracranial venous sinuses
- 4.) Diploic veins – from bones of the neurocranium
- 5.) Labyrinthine veins – from the inner ear
- 6.) Emissary vein – a connection between intracranial and extracranial veins

#### Extracranial tributaries

- 1.) Facial vein
- 2.) Lingual vein
- 3.) Occasionally, Occipital vein

### References

- HUDÁK, Radovan – KACHLÍK, David. *Memorix anatomie*. 2. edition. Triton, 2013. ISBN 978-80-7387-712-5.