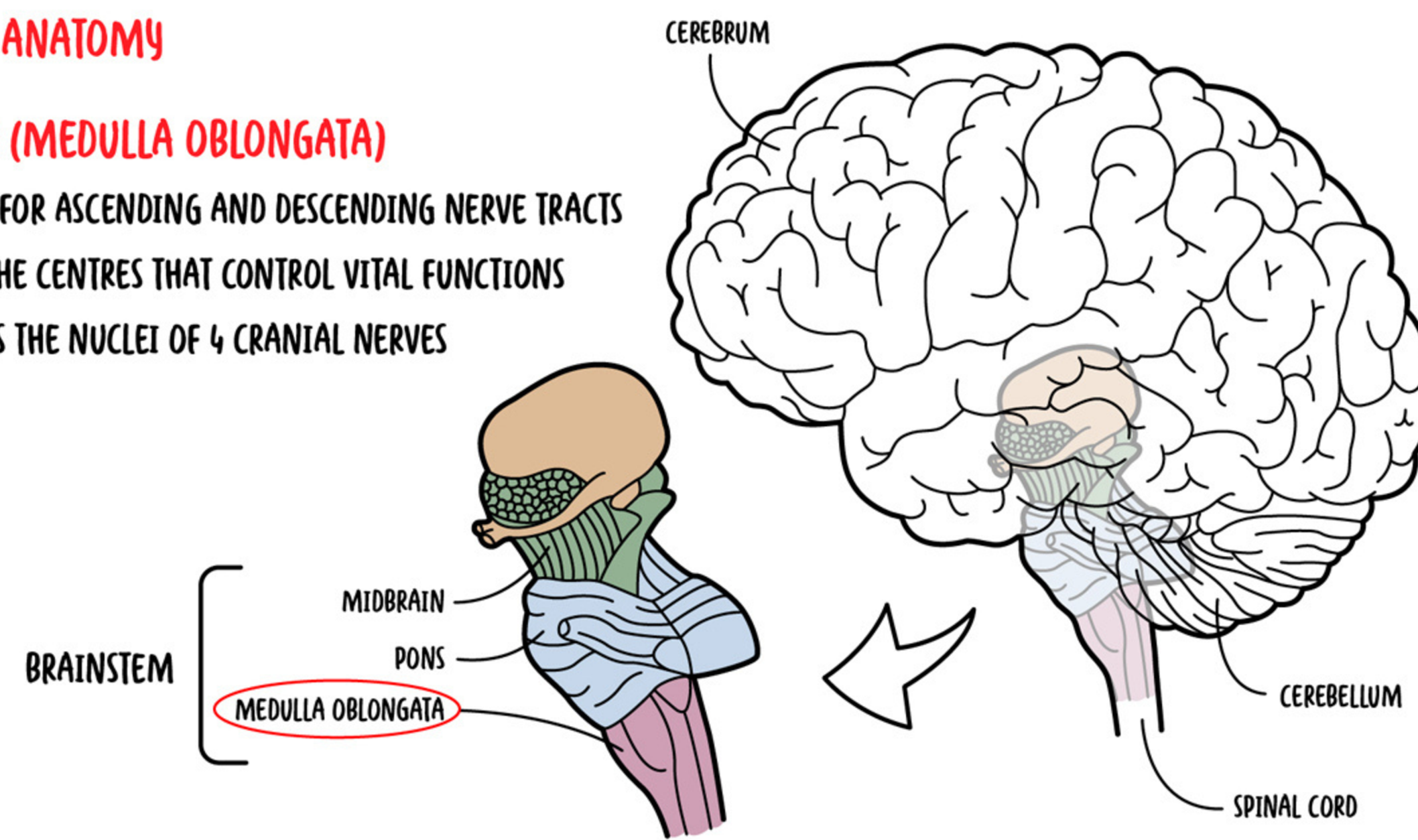


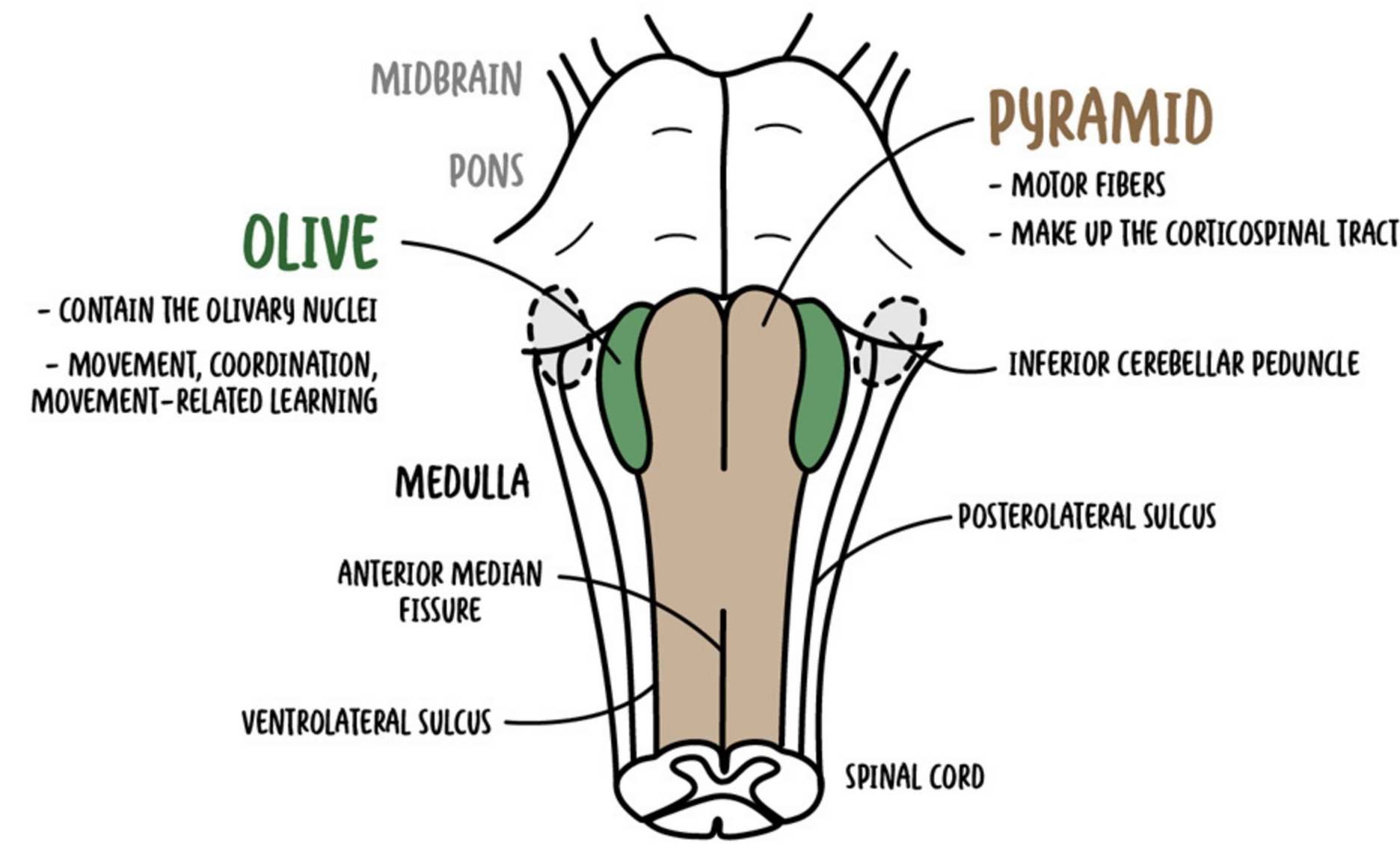
GENERAL ANATOMY

MEDULLA (MEDULLA OBLONGATA)

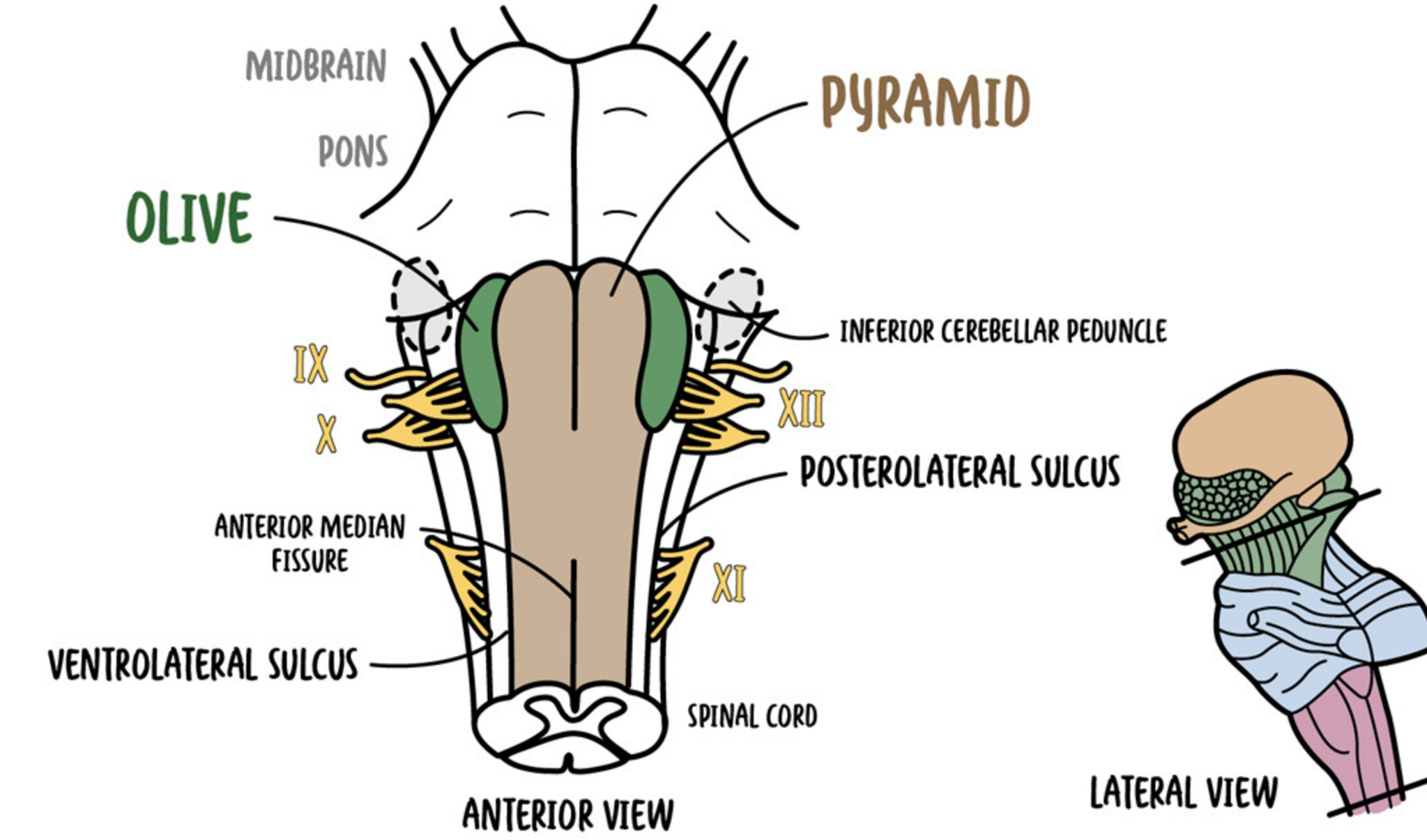
1. CONDUIT FOR ASCENDING AND DESCENDING NERVE TRACTS
2. HOUSES THE CENTRES THAT CONTROL VITAL FUNCTIONS
3. CONTAINS THE NUCLEI OF 4 CRANIAL NERVES



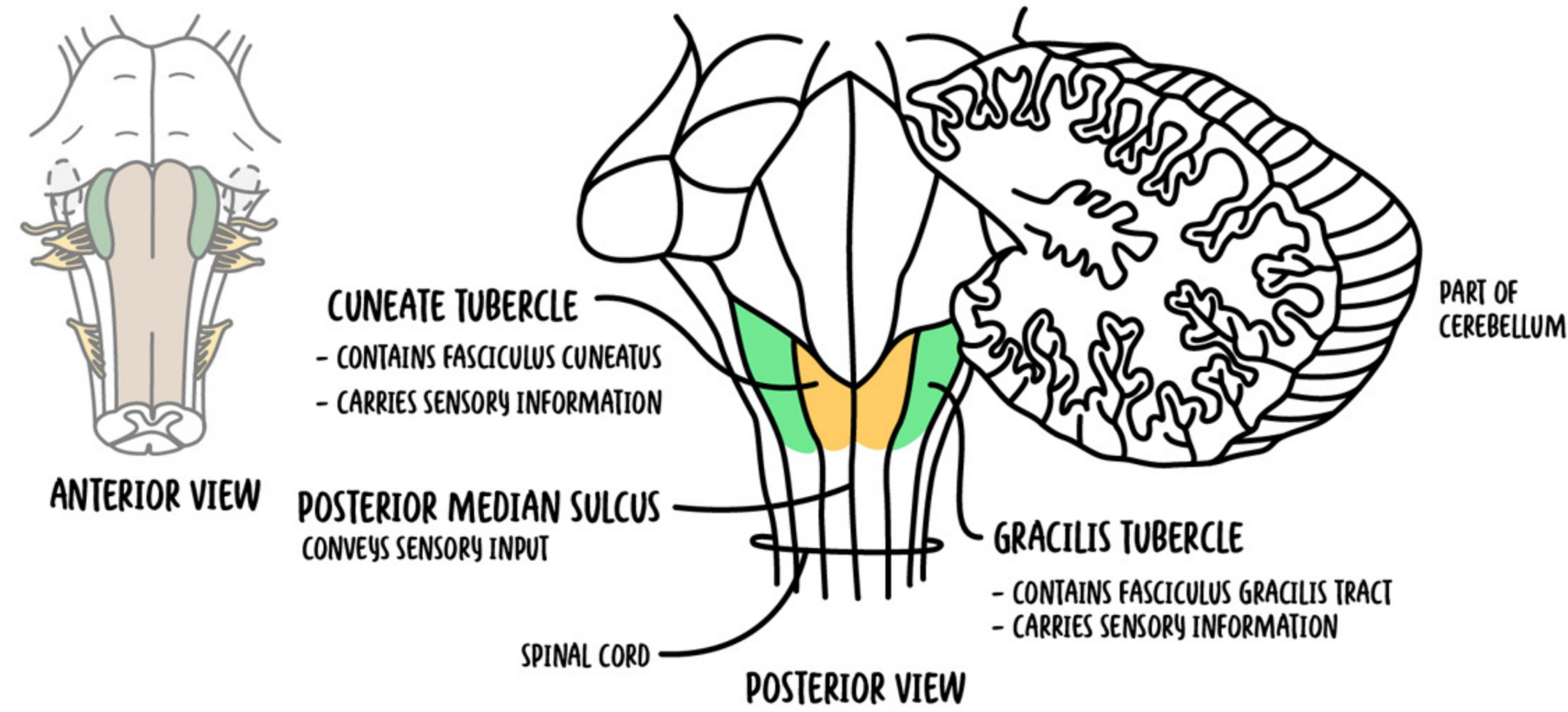
EXTERNAL ANATOMY - ANTERIOR SURFACE



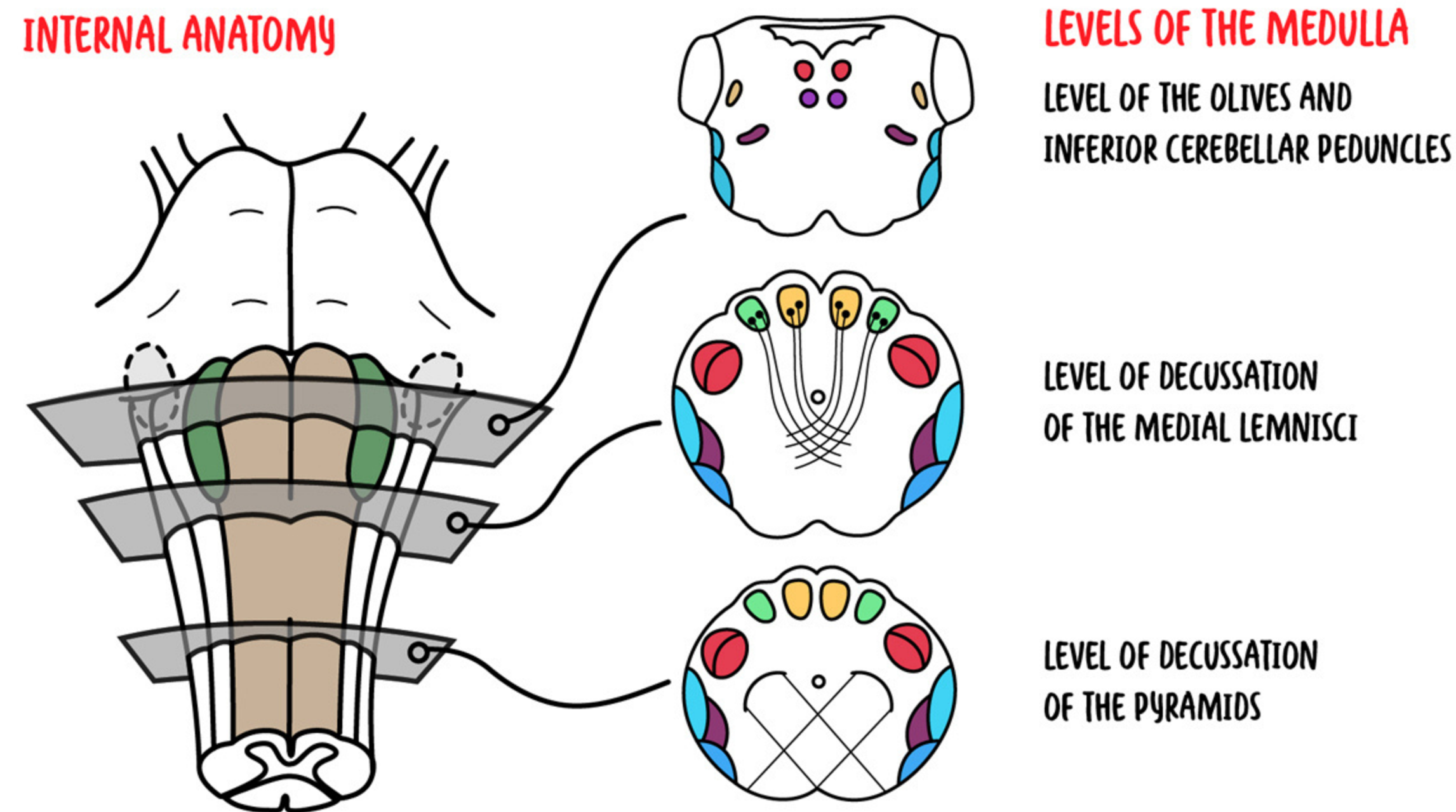
EXTERNAL ANATOMY - ANTERIOR SURFACE



EXTERNAL ANATOMY - POSTERIOR SURFACE

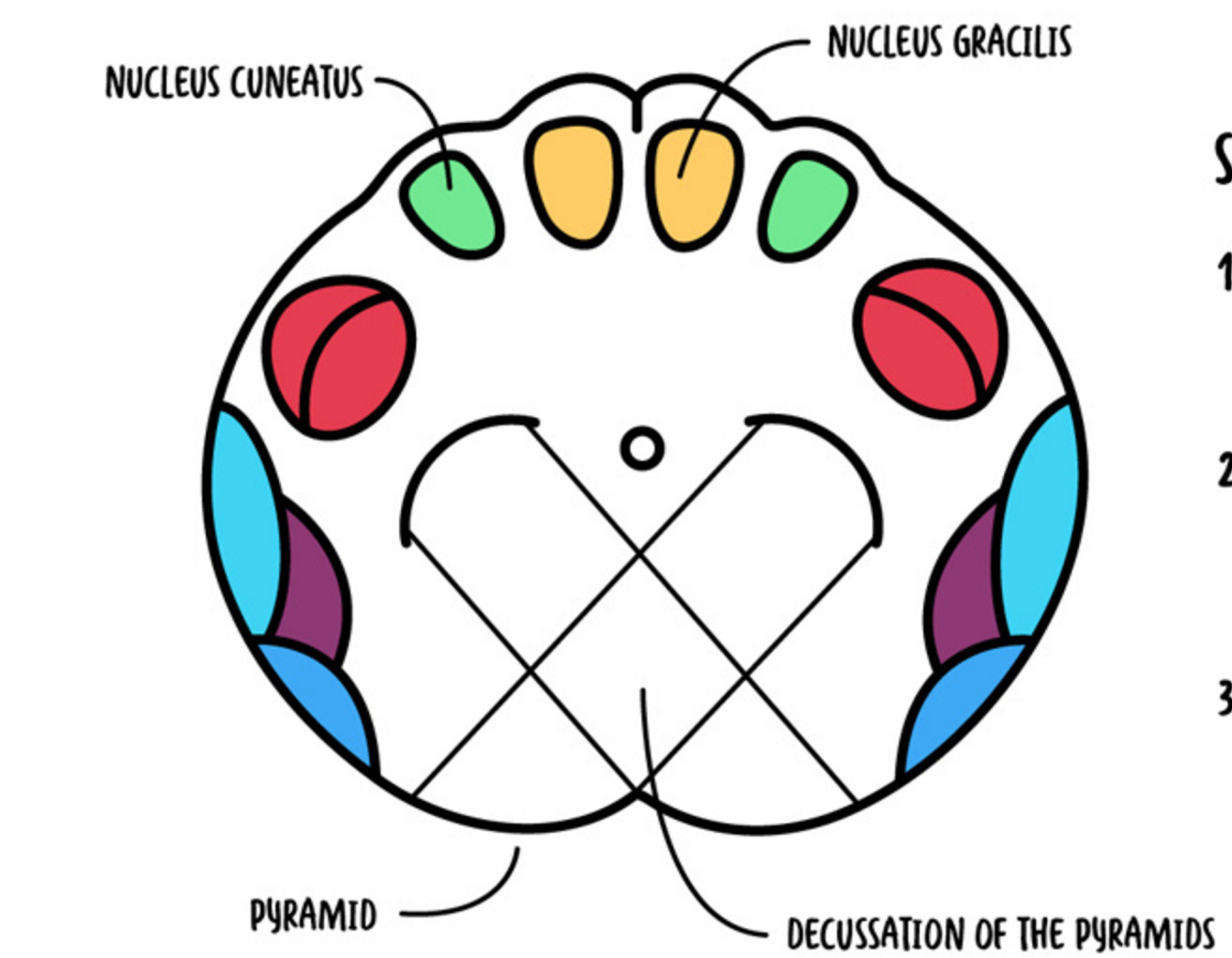


INTERNAL ANATOMY



LEVEL OF DECUSSATION OF THE PYRAMIDS

- MAJOR DECUSSATION POINT OF THE DESCENDING MOTOR FIBRES, THE GREAT MOTOR DECUSSATION

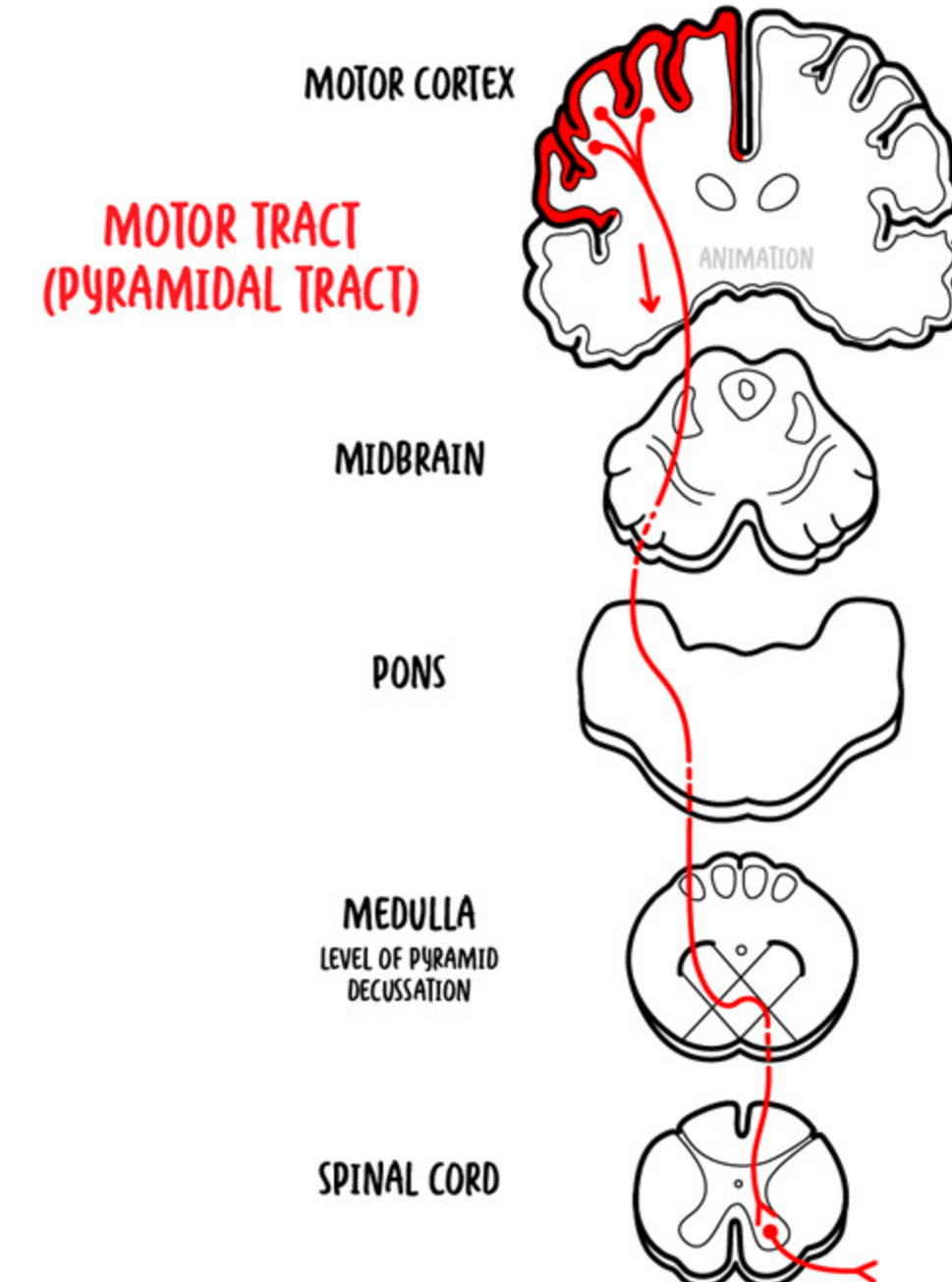
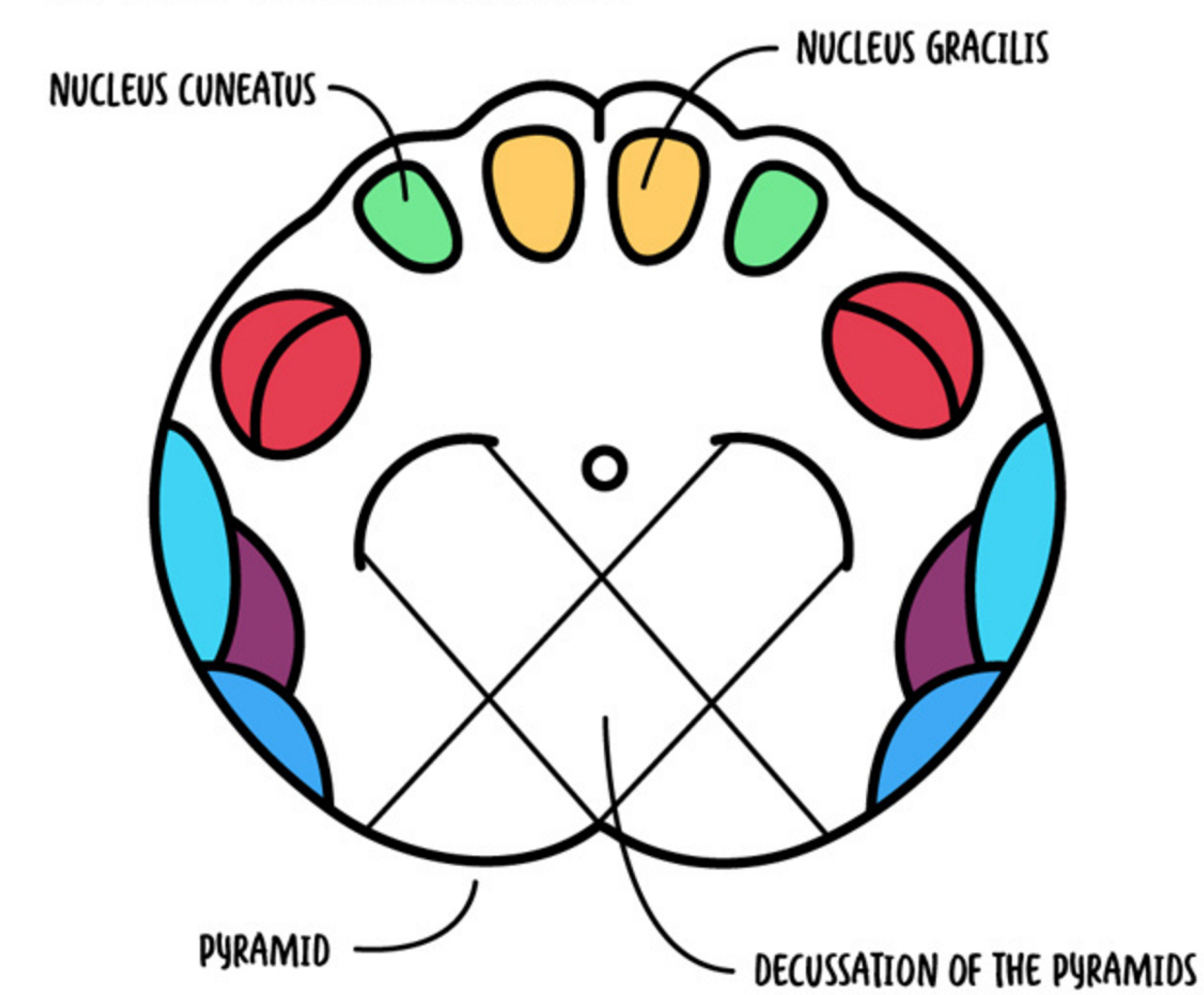


SENSORY TRACTS

1. SPINOCEREBELLAR TRACTS (ANTERIOR AND POSTERIOR) - UNCONSCIOUS PROPRIOCEPTIVE INFORMATION
2. LATERAL SPINOTHALAMIC TRACT - TEMPERATURE AND PAIN
3. SPINAL TRACT OF CRANIAL NERVE V

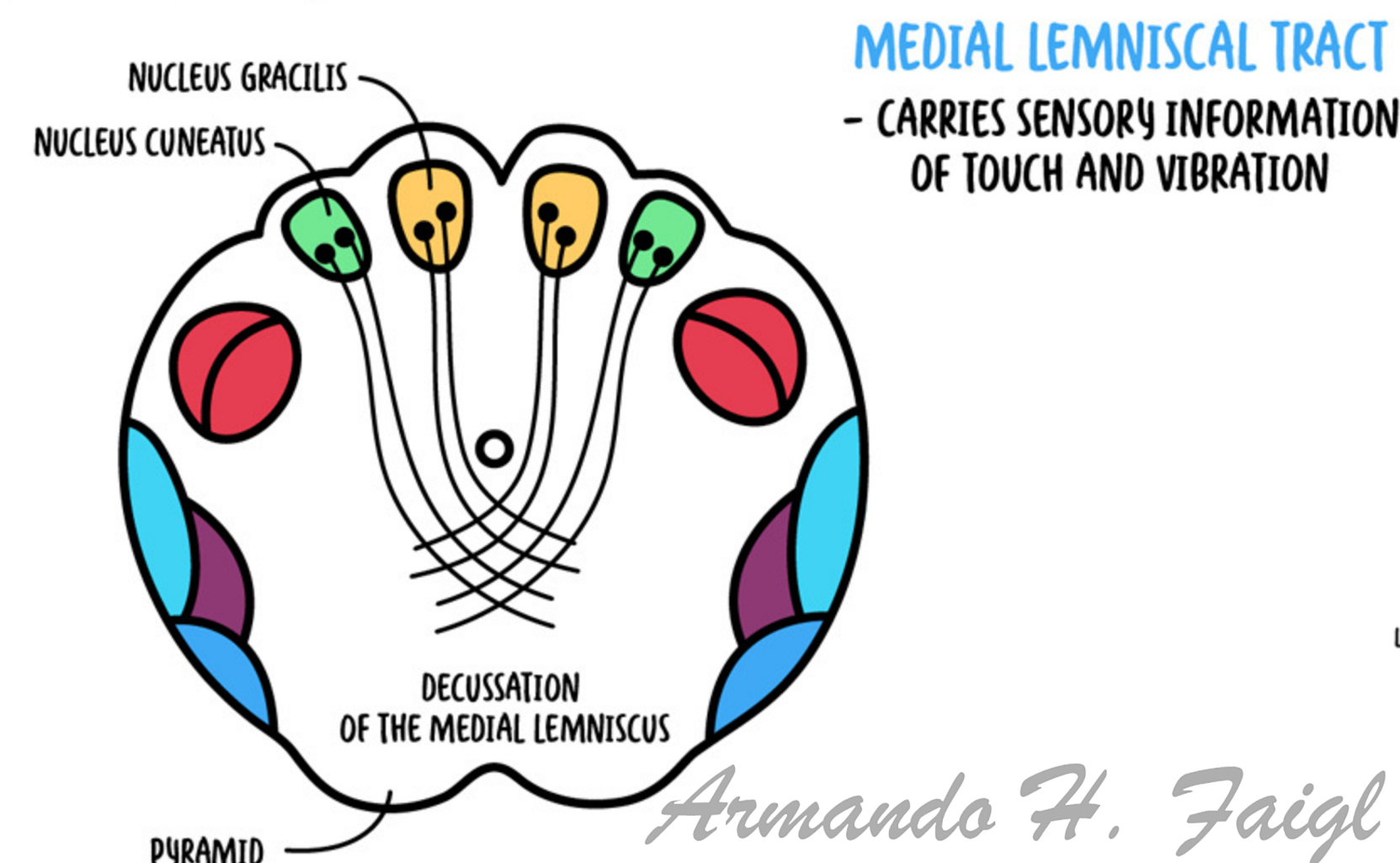
LEVEL OF DECUSSATION OF THE PYRAMIDS

- MAJOR DECUSSATION POINT OF THE DESCENDING MOTOR FIBRES, THE GREAT MOTOR DECUSSATION



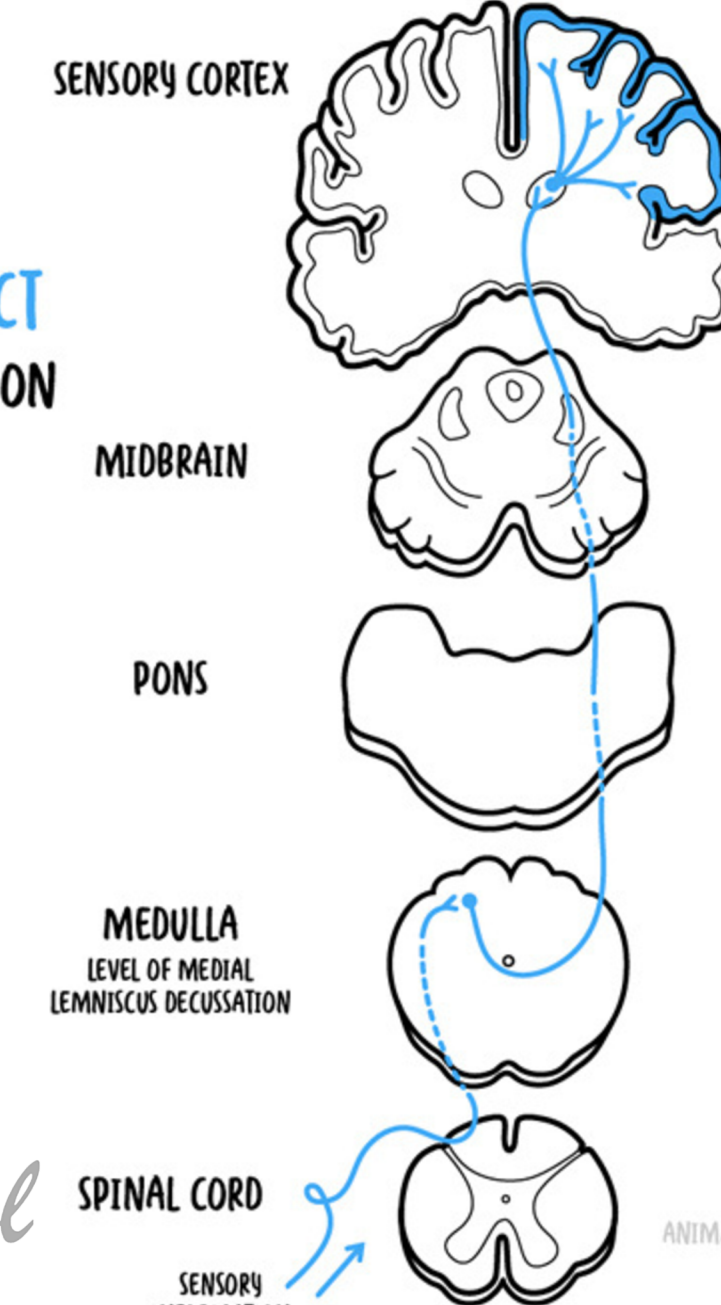
LEVEL OF THE DECUSSATION OF THE MEDIAL LEMNISCUS

- MAJOR DECUSSATION POINT OF THE MEDIAL LEMNISCAL FIBERS, THE GREAT SENSORY DECUSSATION



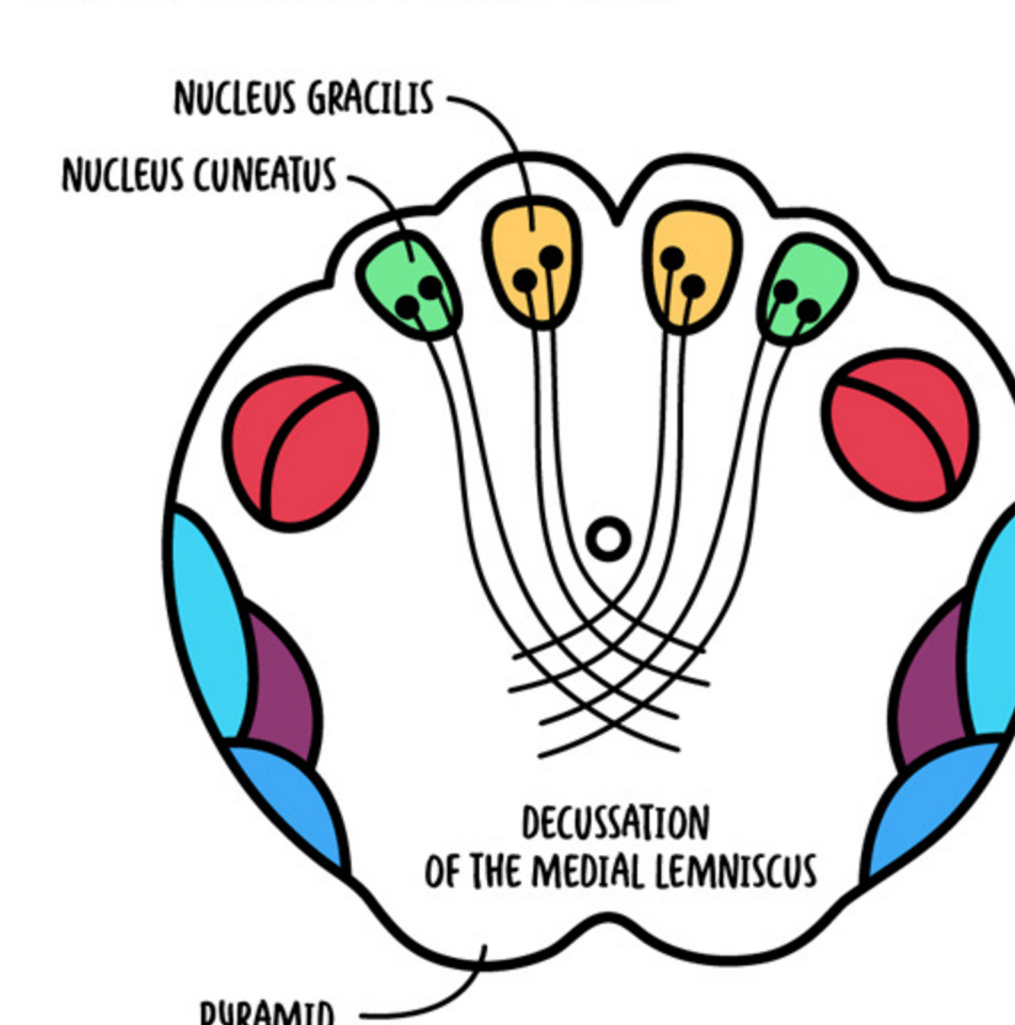
MEDIAL LEMNISCAL TRACT

- CARRIES SENSORY INFORMATION OF TOUCH AND VIBRATION



LEVEL OF THE DECUSSATION OF THE MEDIAL LEMNISCUS

- MAJOR DECUSSATION POINT OF THE MEDIAL LEMNISCAL FIBERS, THE GREAT SENSORY DECUSSATION



OTHER SENSORY TRACT:

1. SPINOCEREBELLAR TRACTS (ANTERIOR AND POSTERIOR)
2. LATERAL SPINOTHALAMIC TRACT
3. SPINAL TRACT OF CRANIAL NERVE V

MOTOR TRACTS

- TRAVELLING WITHIN PYRAMIDS

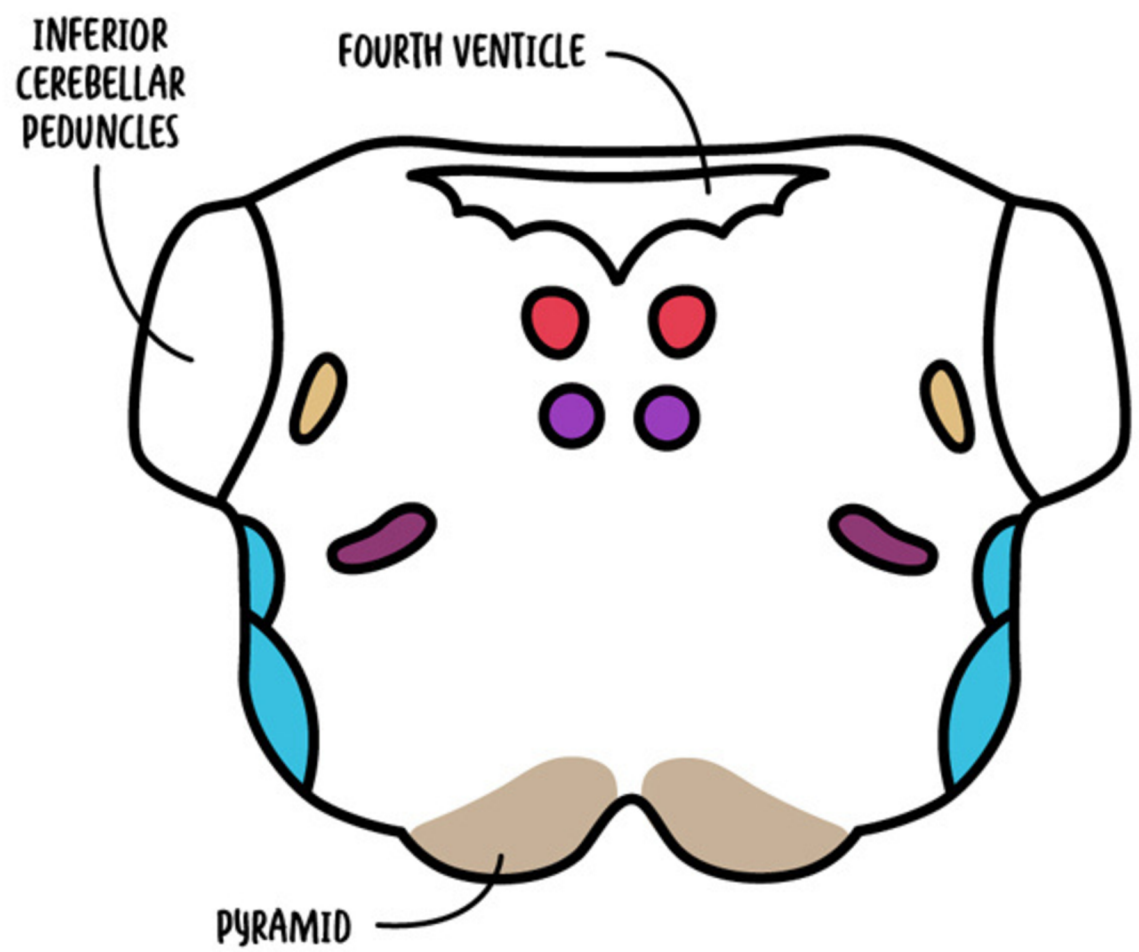
NUCLEI

- NUCLEUS GRACILIS
- NUCLEUS CUNEATUS
- SPINAL NUCLEUS OF CRANIAL NERVE V
- ACCESSORY NUCLEUS
- HYPOGLOSSAL NUCLEUS (CN XII)

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LEVEL OF THE OLIVES AND INFERIOR CEREBELLAR PEDUNCLES

- MAJOR DECUSSATION POINT OF THE MEDIAL LEMNISCAL FIBERS, THE GREAT SENSORY DISCUSSION



MOTOR TRACTS

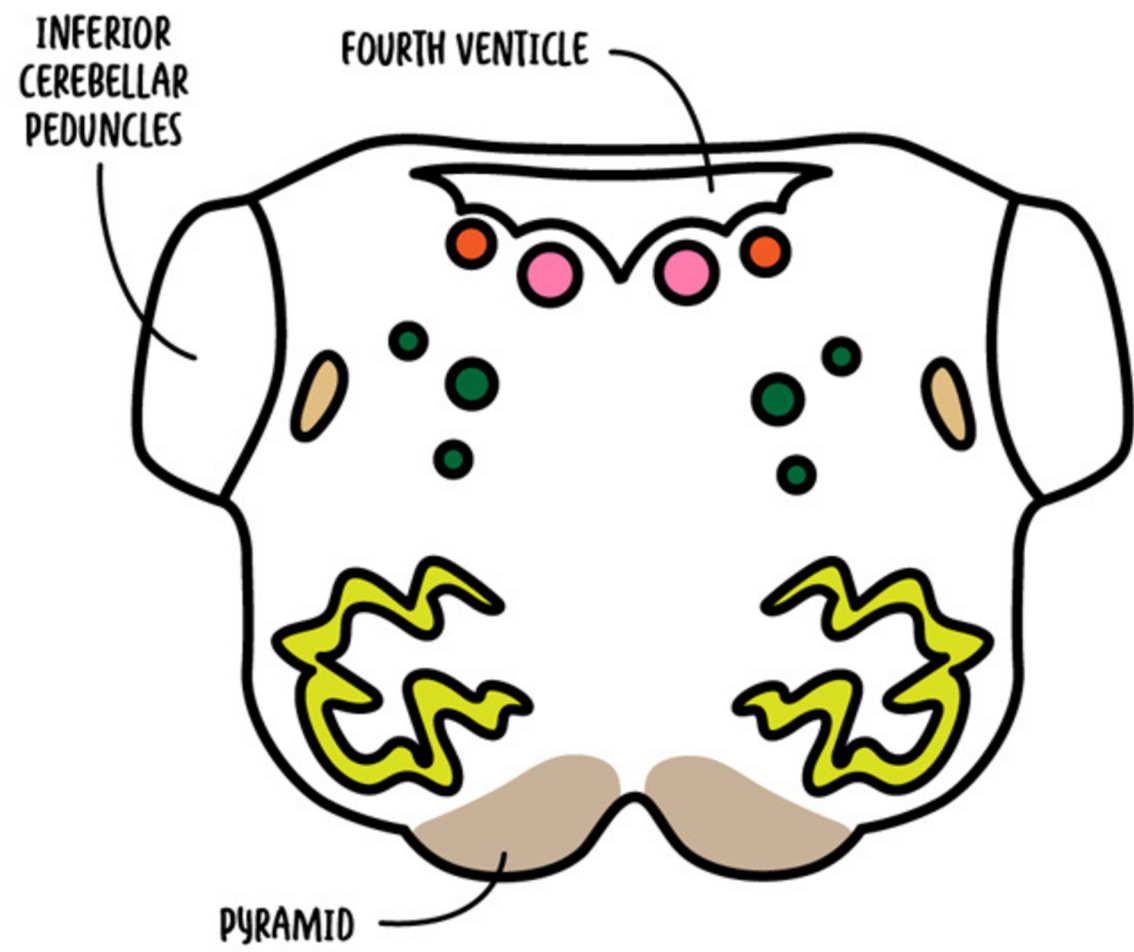
- TRAVELLING WITHIN PYRAMIDS

SENSORY TRACTS

- MEDIAL LONGITUDINAL FASCICULUS TRACT
- TECTOSPINAL TRACT
- SPINOCEREBELLAR TRACTS
- LATERAL SPINOTHALAMIC TRACT
- SPINAL TRACT OF CRANIAL NERVE V

LEVEL OF THE OLIVES AND INFERIOR CEREBELLAR PEDUNCLES

- MAJOR DECUSSATION POINT OF THE MEDIAL LEMNISCAL FIBERS, THE GREAT SENSORY DISCUSSION



IMPORTANT NUCLEI

- OLIVARY NUCLEUS
- GLOSSOPHARYNGEAL NUCLEUS
- VAGAL NUCLEUS
- SPINAL NUCLEUS OF CRANIAL NERVE V
- HYPOGLOSSAL NUCLEUS

IMPORTANT CENTRES

VITAL FUNCTIONS

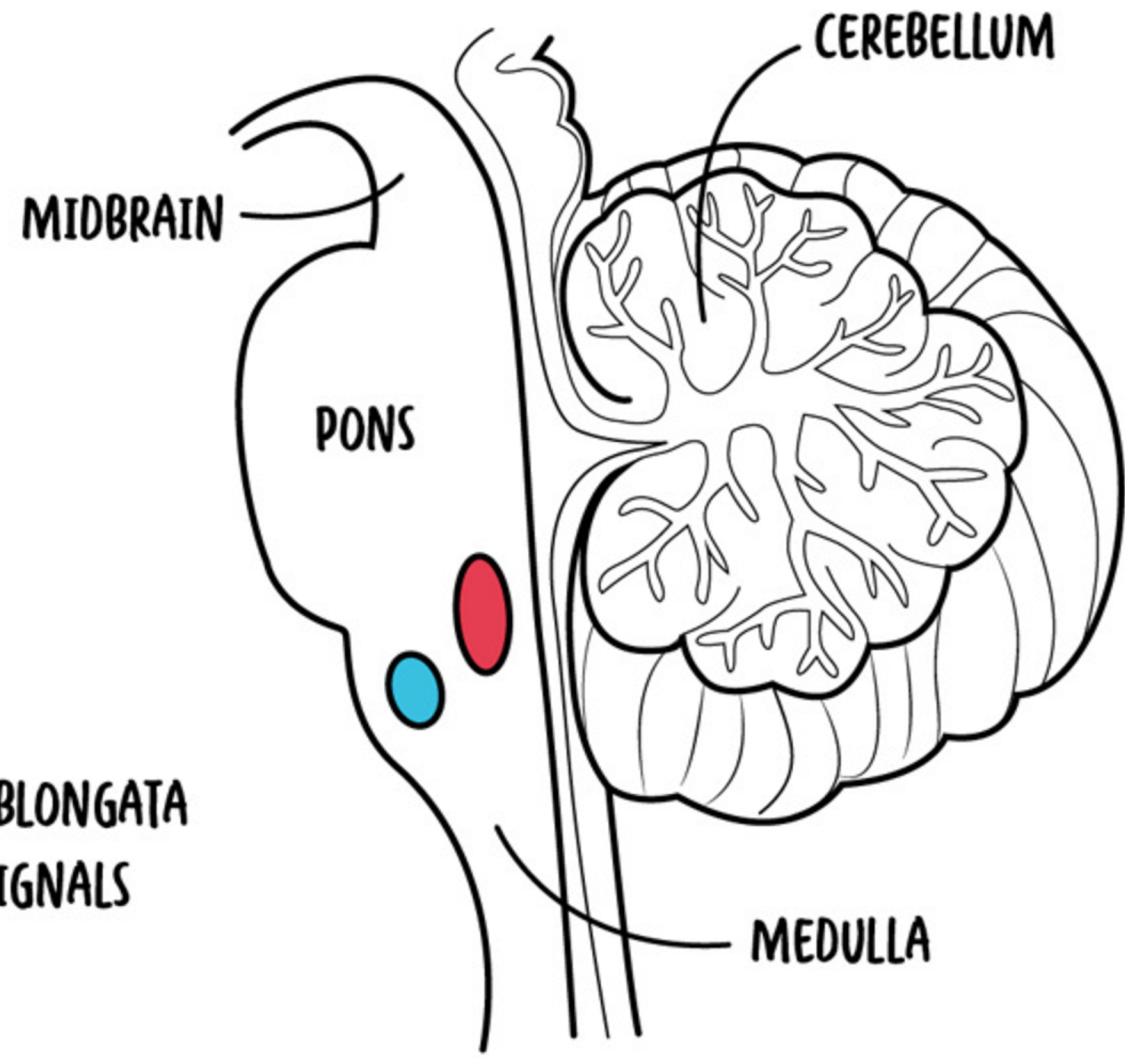
- HEART RATE
- BREATHING
- BLOOD PRESSURE

1. RESPIRATORY CENTRE

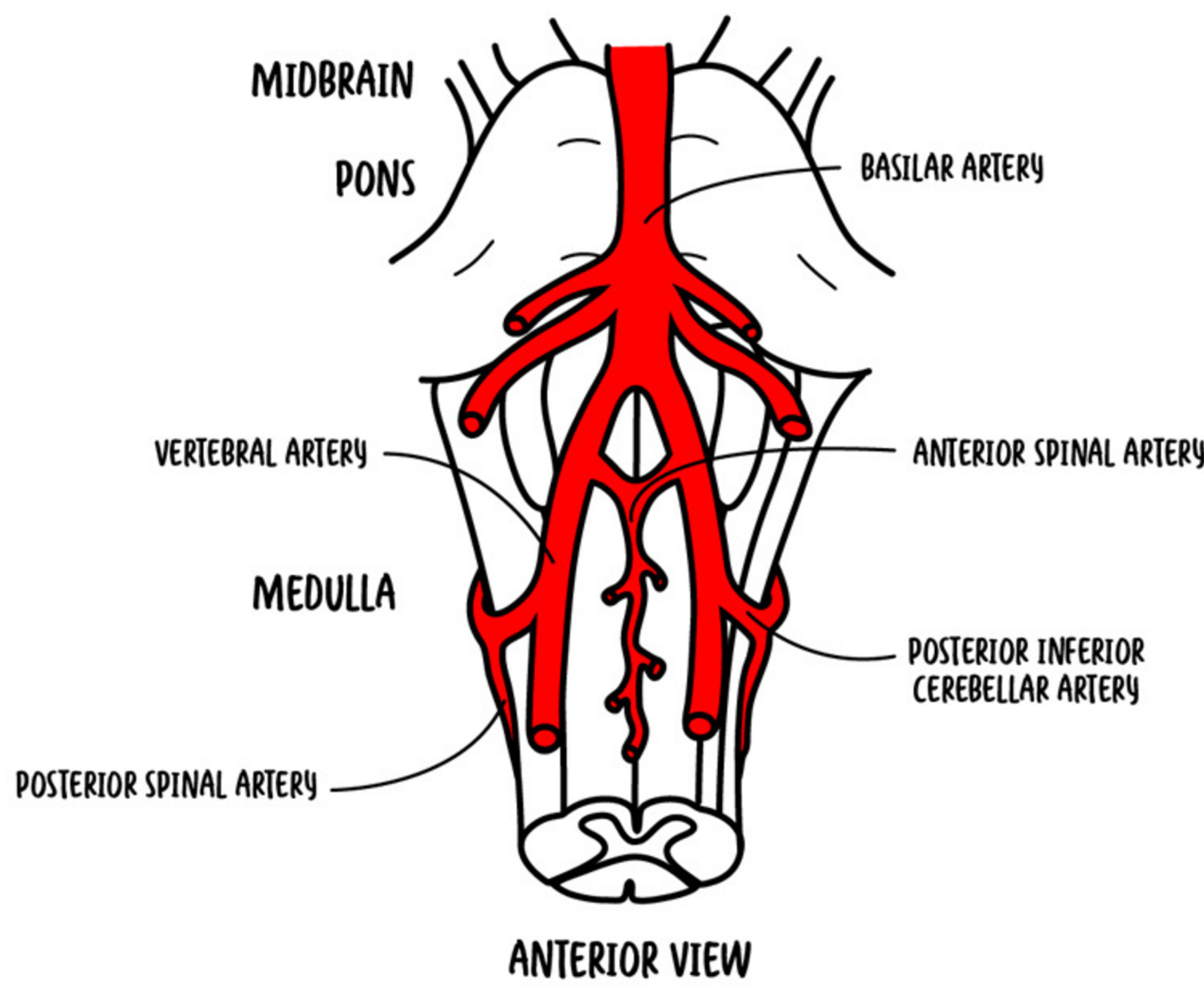
- LOCATED WITHIN THE PONS AND MEDULLA OBLONGATA

2. VASOMOTOR CENTRE

- ARTERIAL BLOOD PRESSURE
- LIES WITHIN THE MEDULLA OBLONGATA
- COLLECTING BARORECEPTOR SIGNALS
- AUTONOMIC RESPONSE



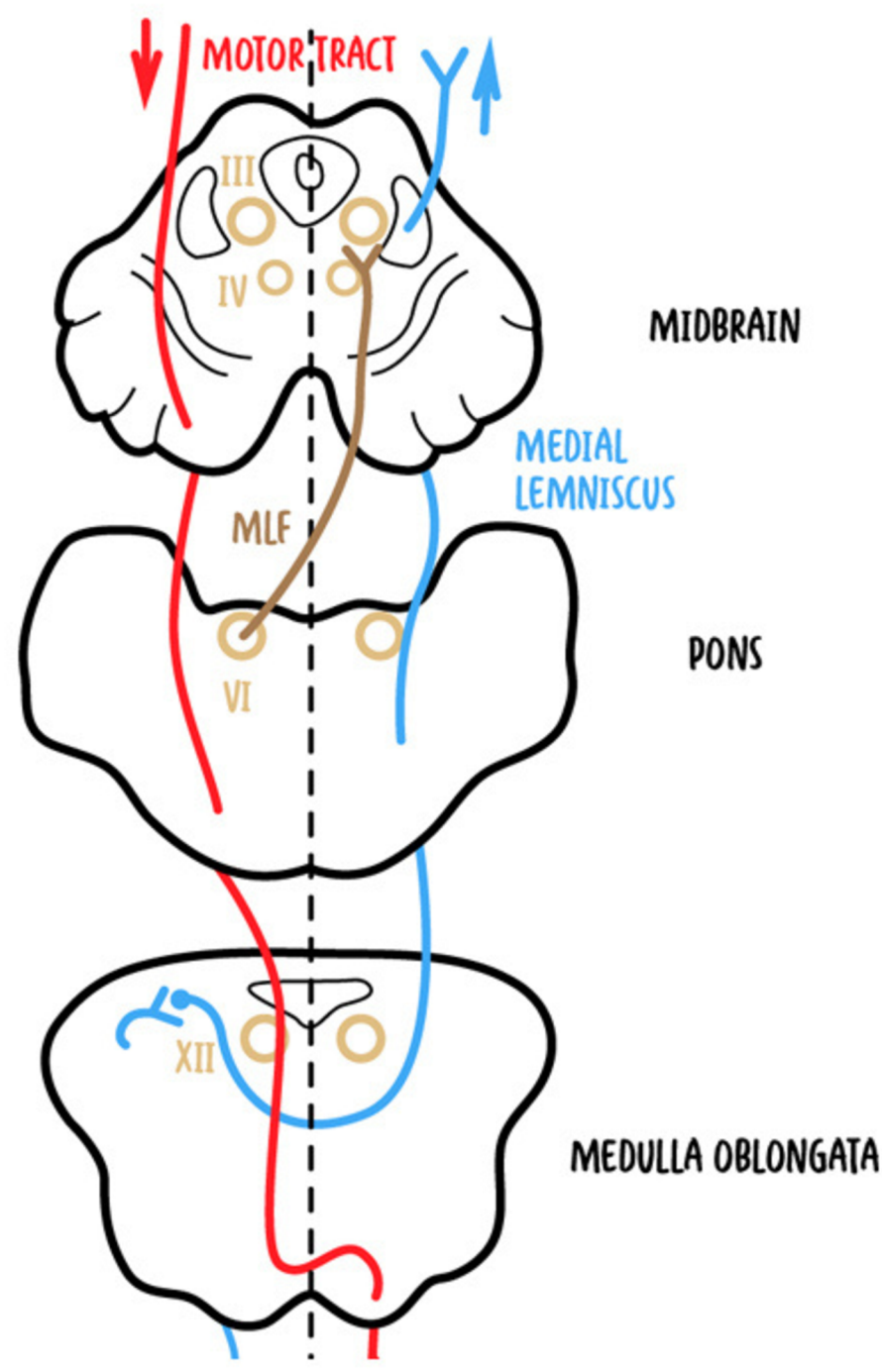
BLOOD SUPPLY



RULE OF 4

4 STRUCTURES IN THE MIDDLE BEGINNING WITH «M»:

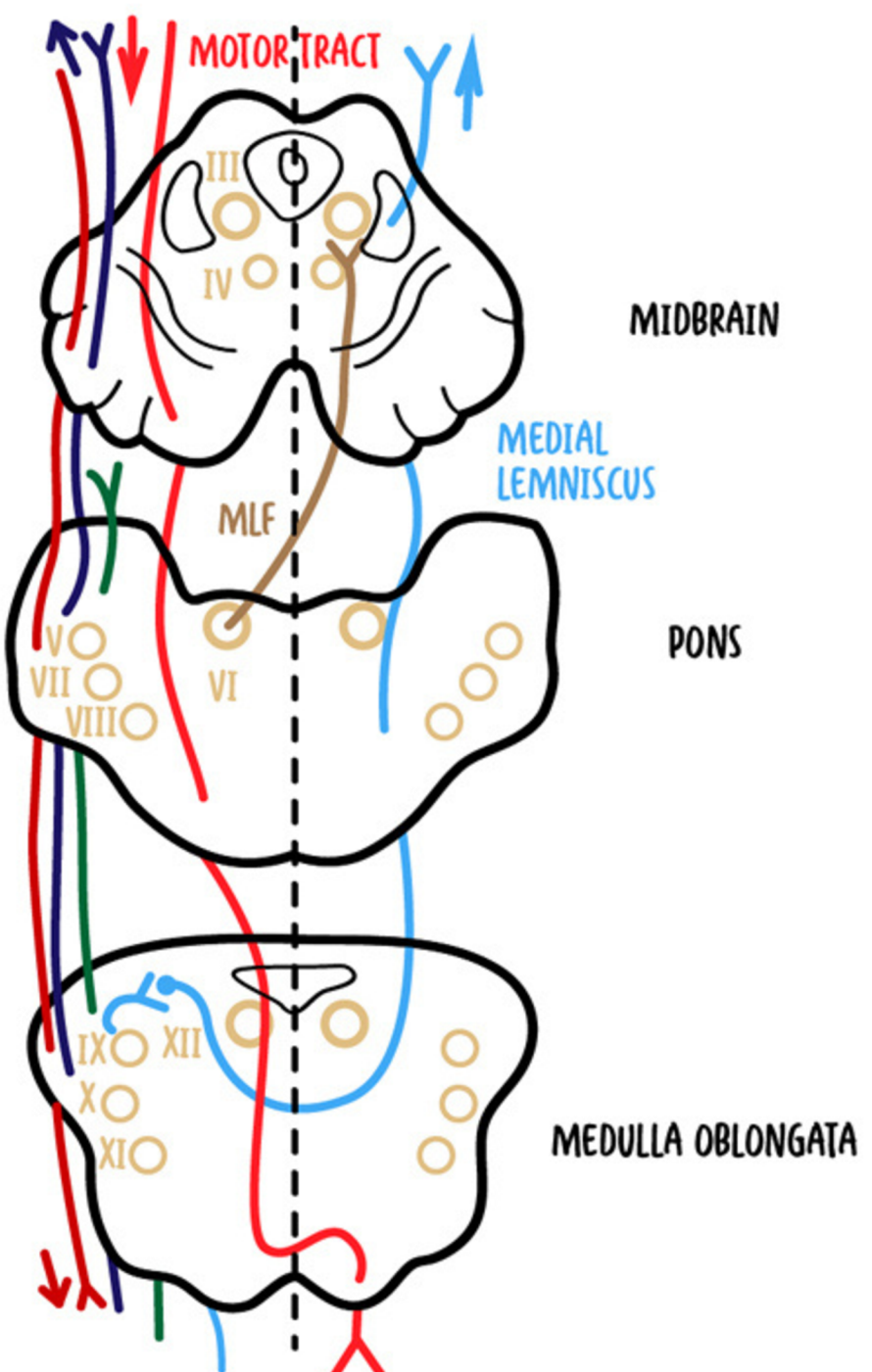
- MOTOR PATHWAY (CORTICOSPINAL TRACT)
- MEDIAL LEMNISCUS
- MEDIAL LONGITUDINAL FASCICULUS (MLF)
- MOTOR NUCLEUS AND NERVE



RULE OF 4

4 STRUCTURES TO THE SIDE BEGINNING WITH «S»:

- SPINOCEREBELLAR PATHWAY
- SPINOTHALAMIC PATHWAY
- SENSORY NUCLEUS OF THE 5TH CRANIAL NERVE
- SYMPATHETIC PATHWAY

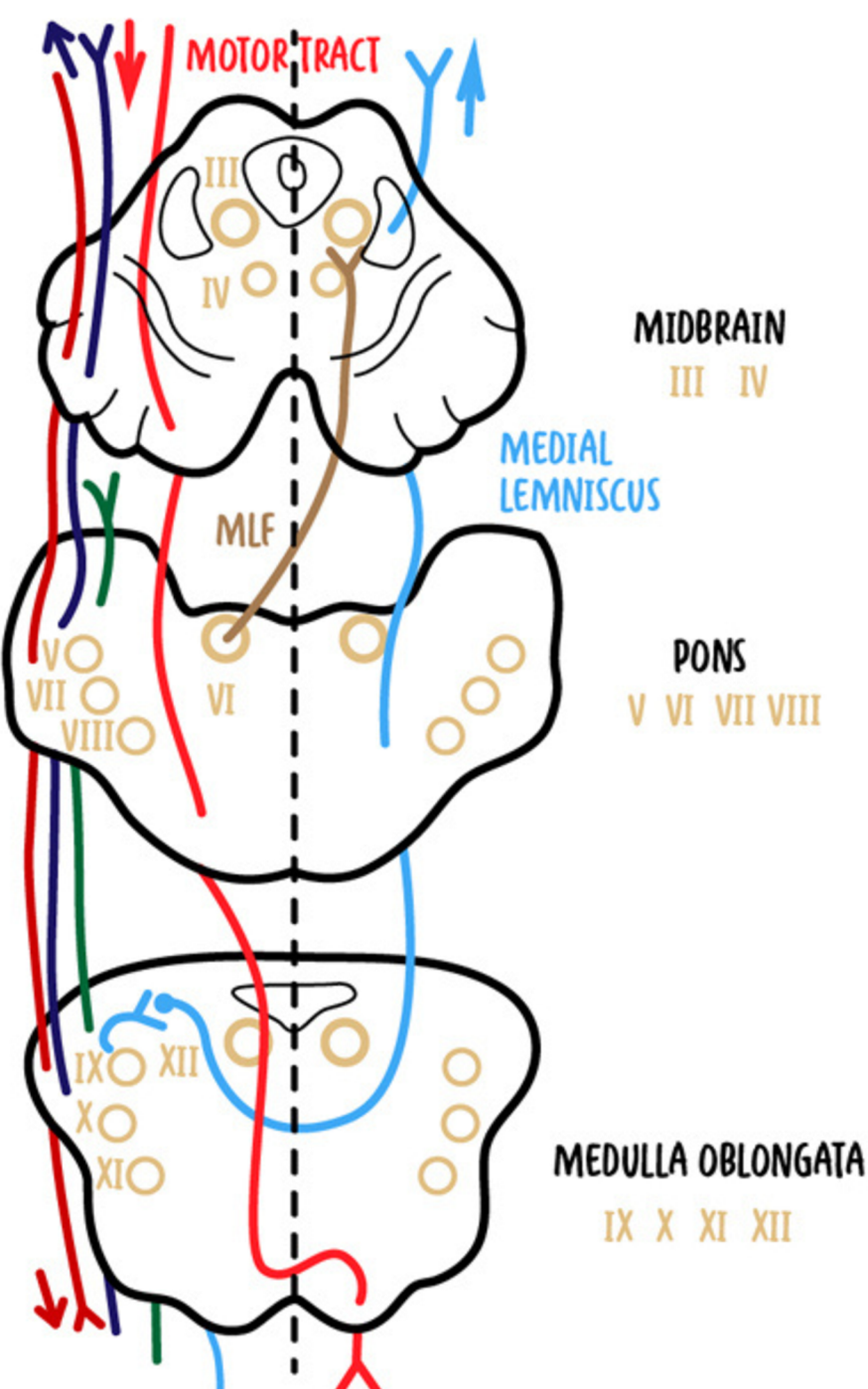


RULE OF 4

4 ABOVE THE PONS (2 IN THE MIDBRAIN)

4 IN THE PONS

4 CRANIAL NERVES IN THE MEDULLA



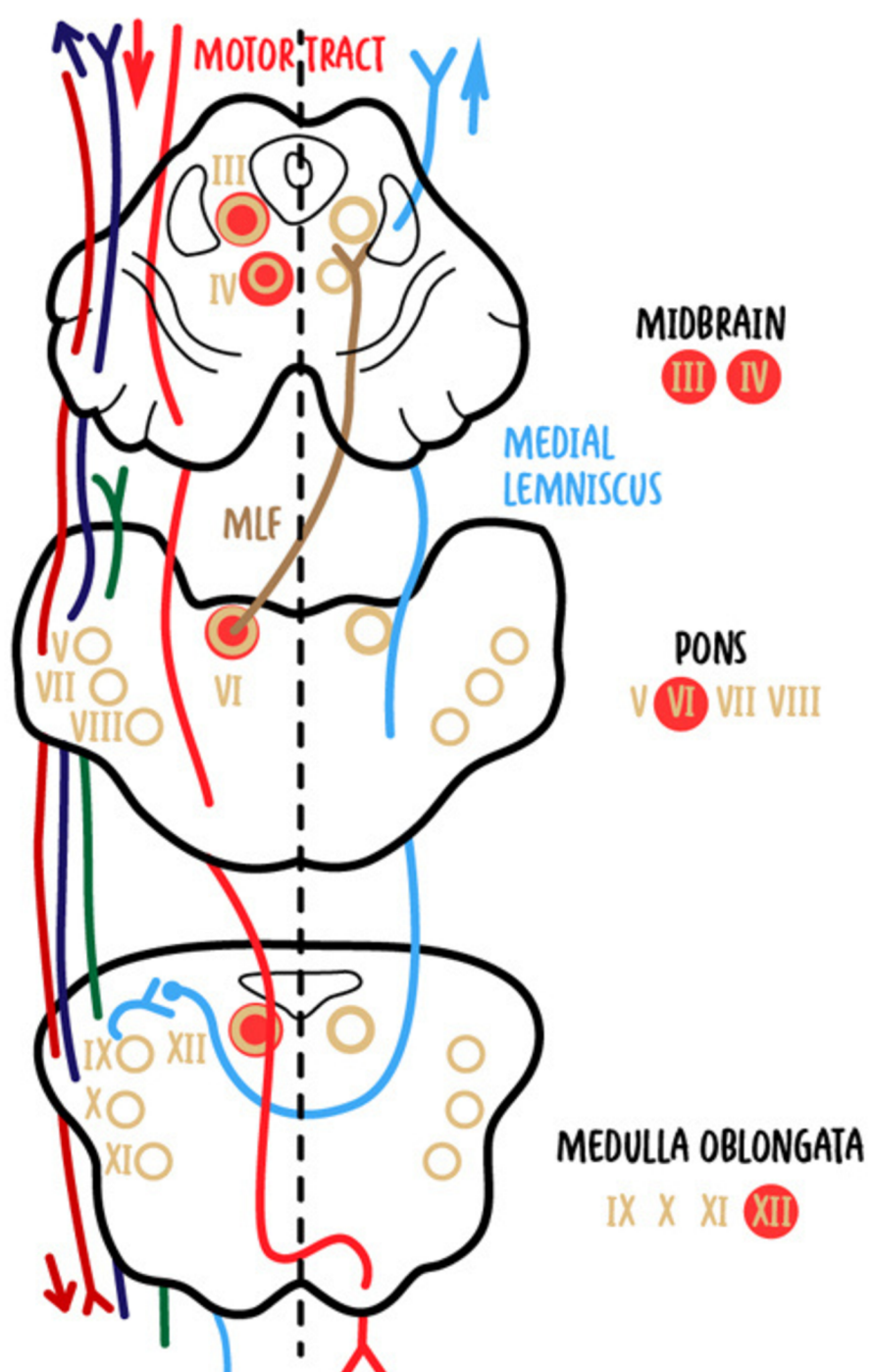
RULE OF 4

MOTOR CRANIAL NERVE NUCLEI DIVIDE EQUALLY INTO 12

4 ABOVE THE PONS (2 IN THE MIDBRAIN)

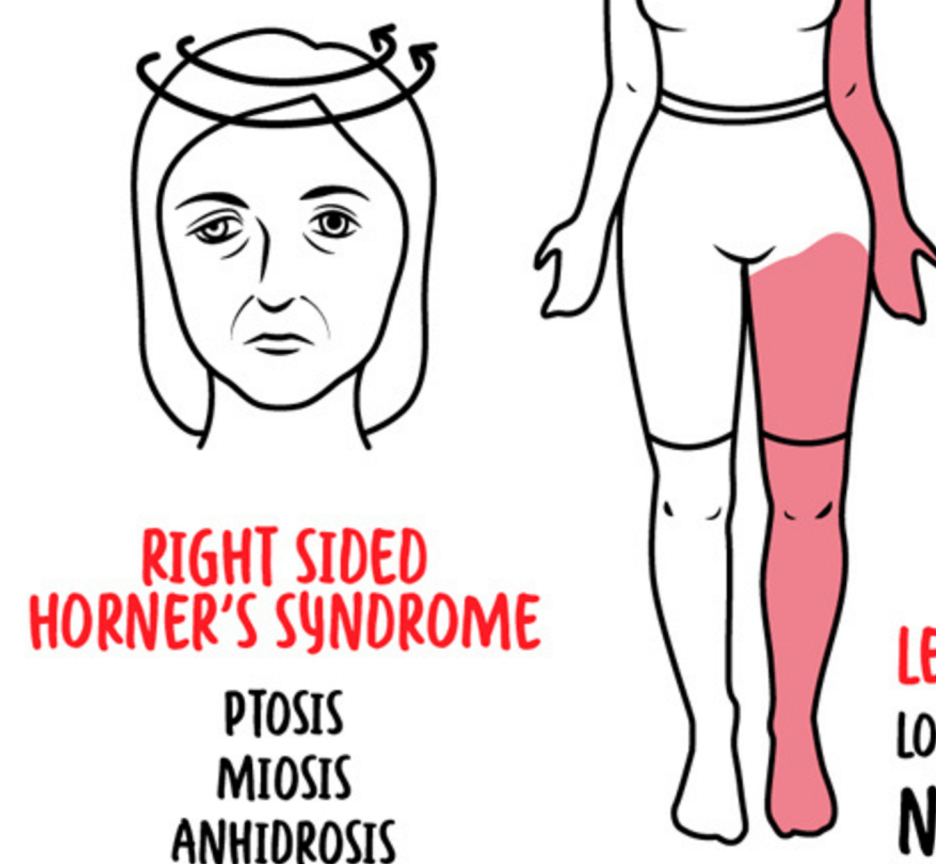
4 IN THE PONS

4 CRANIAL NERVES IN THE MEDULLA



EXAMPLES

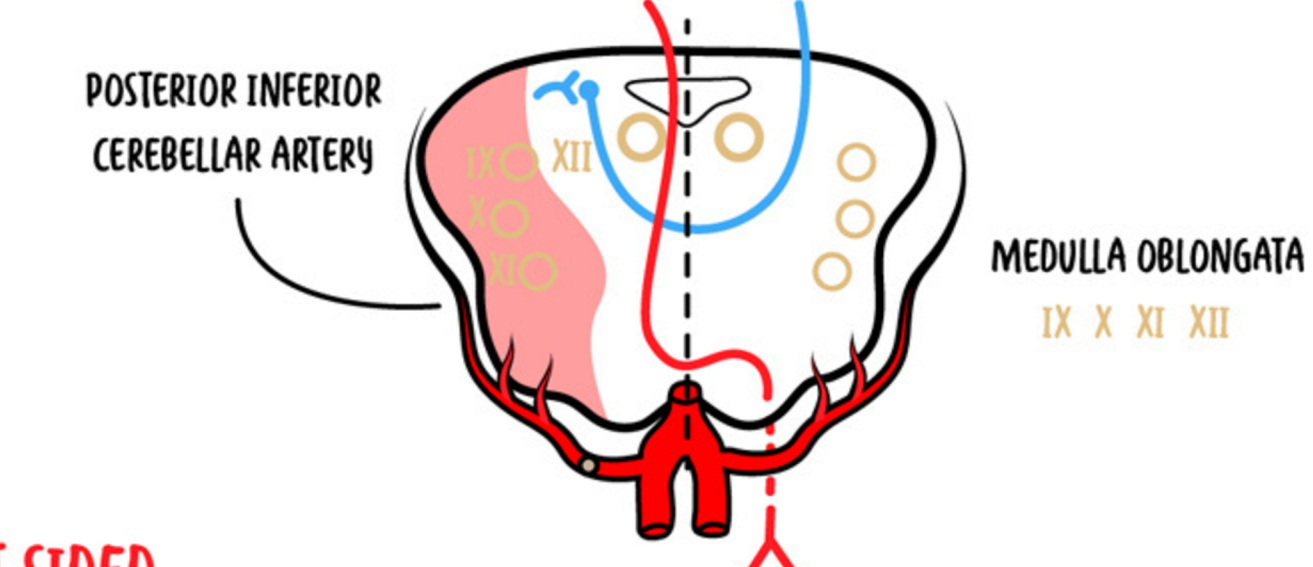
- DIFFICULTY SWALLOWING
- VERTIGO
- NAUSEA AND VOMITING



WALLENBERG SYNDROME OR LATERAL MEDULLARY SYNDROME

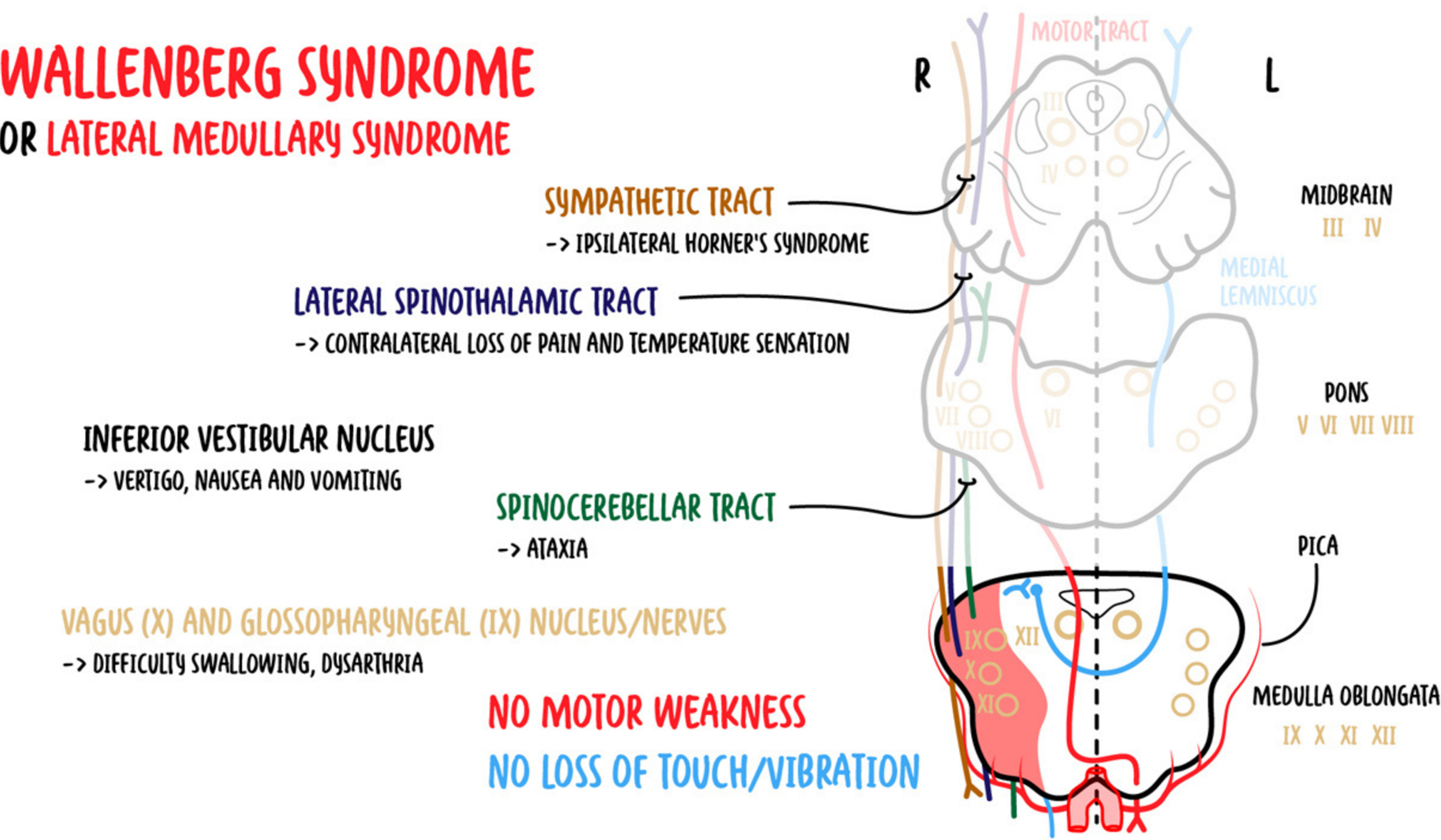
- INFARCTION OF THE POSTERIOR INFERIOR CEREBELLAR ARTERY

LATERAL

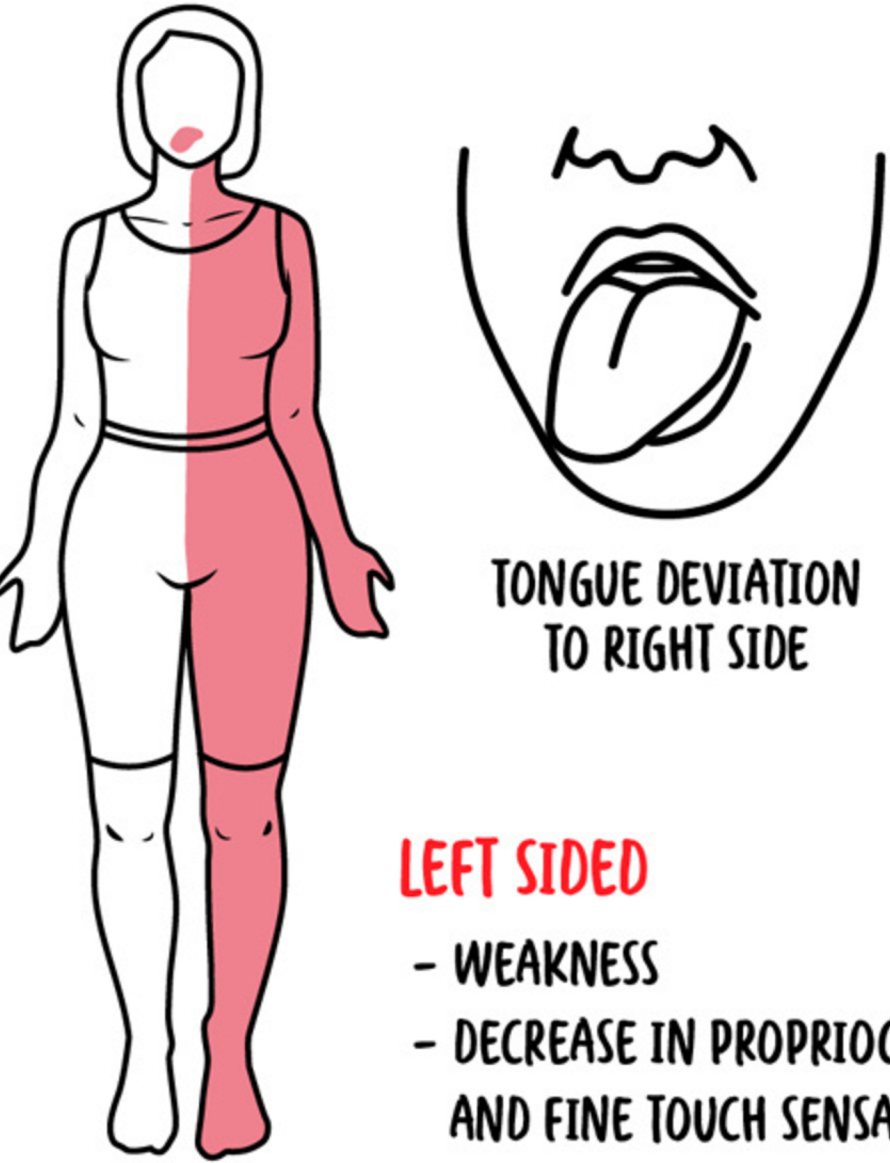


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WALLENBERG SYNDROME
OR LATERAL MEDULLARY SYNDROME

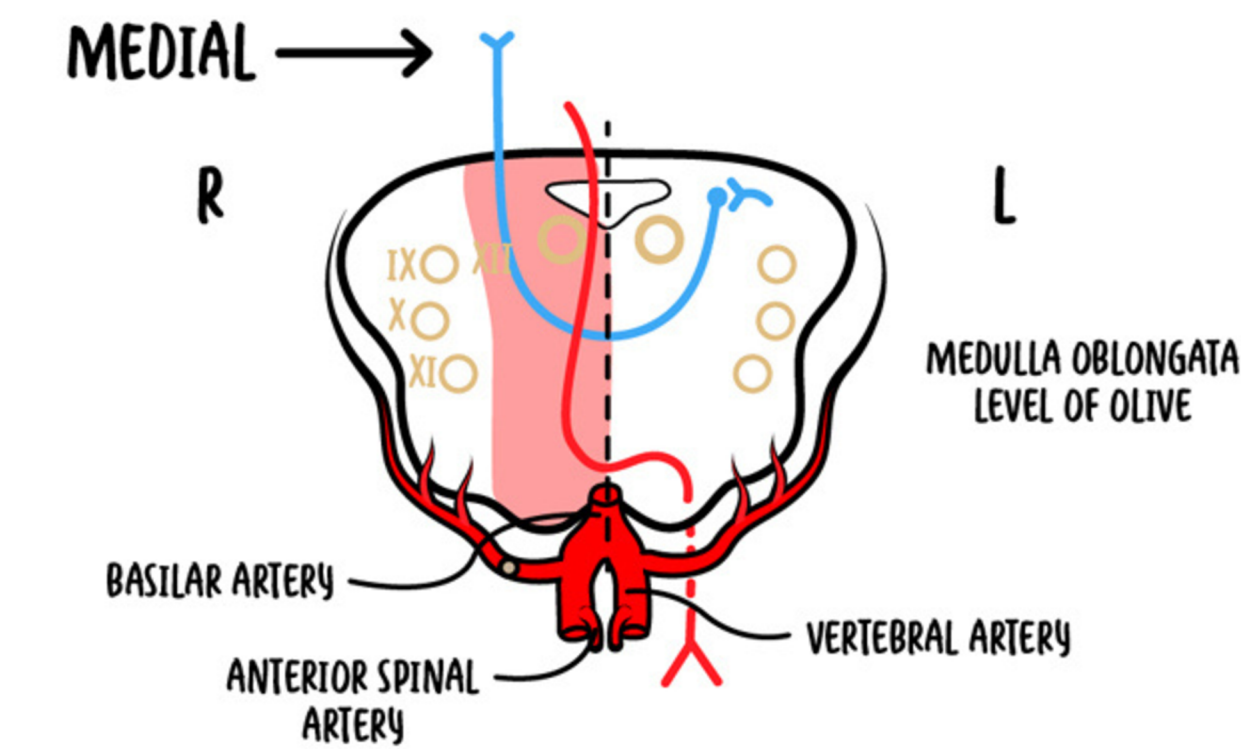


EXAMPLES



DEJERINE SYNDROME
OR MEDIAL MEDULLARY SYNDROME

- OCCLUSION OF THE SMALL PERFORATING BRANCHES



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DEJERINE SYNDROME
OR MEDIAL MEDULLARY SYNDROME

