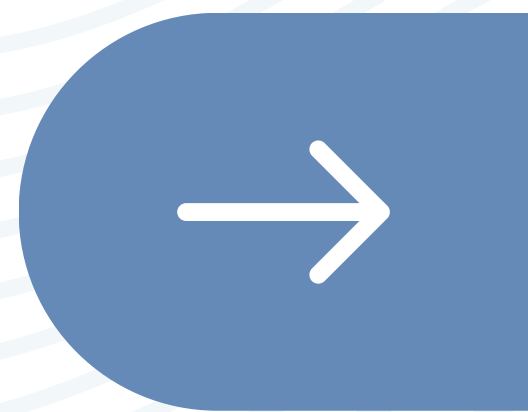


#DIBS BY NEXTILLO

DAILY INFORMATION BULLETIN SERVICE

SPINAL TRACT DECUSSATIONS





#DIBSBYNEXTILLO

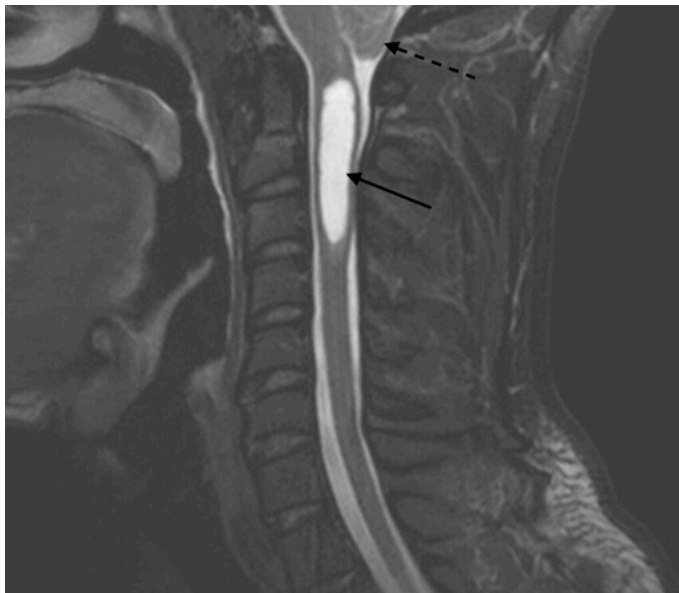
DAILY INFORMATION BULLETIN SERVICE

SPINAL TRACT DECUSSATIONS

- *The spinal cord is composed of gray and white matter, appearing in a cross-section as H-shaped gray matter surrounded by white matter.*
- *The gray matter consists of the cell bodies of motor and sensory neurons, interneurons, and neuropils (neuroglia cells and mostly unmyelinated axons).*



VISUAL REPRESENTATION





SPINAL TRACT DECUSATIONS

ASCENDING TRACTS

- *Dorsal column: contains the gracile fasciculus and cuneate fasciculus, which together form the dorsal funiculus.*
- *The dorsal column is responsible for pressure and vibration sensation, two-point discrimination, movement sense, and conscious proprioception.*
- *The dorsal column decussates at the superior portion of the medulla oblongata and forms the medial lemniscus.*

DESCENDING TRACTS

- *Lateral and anterior corticospinal: involved in conscious control of the skeletal muscle.*
- *Most lateral corticospinal tract fibers decussate at the inferior portion of the medulla oblongata.*
- *In contrast, the anterior corticospinal tract descends ipsilaterally in the spinal cord and decussates at the segmental level.*



SPINAL TRACT DECUSSATIONS

SPINOTHALAMIC TRACTS

- *The **upper part of the posterior district of the medulla oblongata** is occupied by the inferior cerebellar peduncle.*
- *It is a thick rope-like strand situated between the lower part of the fourth ventricle and the roots of the glossopharyngeal and vagus nerves.*
- *This peduncle also carries information leaving cerebellum: from the Purkinje cells to the vestibular nuclei in the dorsal brainstem located at the junction between the pons and medulla oblongata.*





MCQ

Question: *A 30-year old female observed unusual sensory symptoms of recent onset. Lifting the hot utensils in the kitchen with single or both hands, her hands suffer burn injuries. She can feel the touch of the objects, but her temperature sense is lost. What would be the possible site of lesion in the CNS?*

- **A Central canal of the spinal cord**
- **B Medulla**
- **C Thalamus**
- **D Sensory cortex**

Answer: *(A) Central canal of the spinal cord*