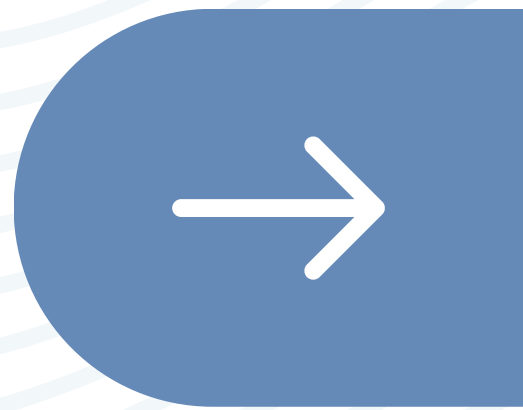


# #DIBS BY NEXTILLO

DAILY INFORMATION BULLETIN SERVICE

**CEREBELLAR PEDUNCLE**





# #DIBSBYNEXTILLO

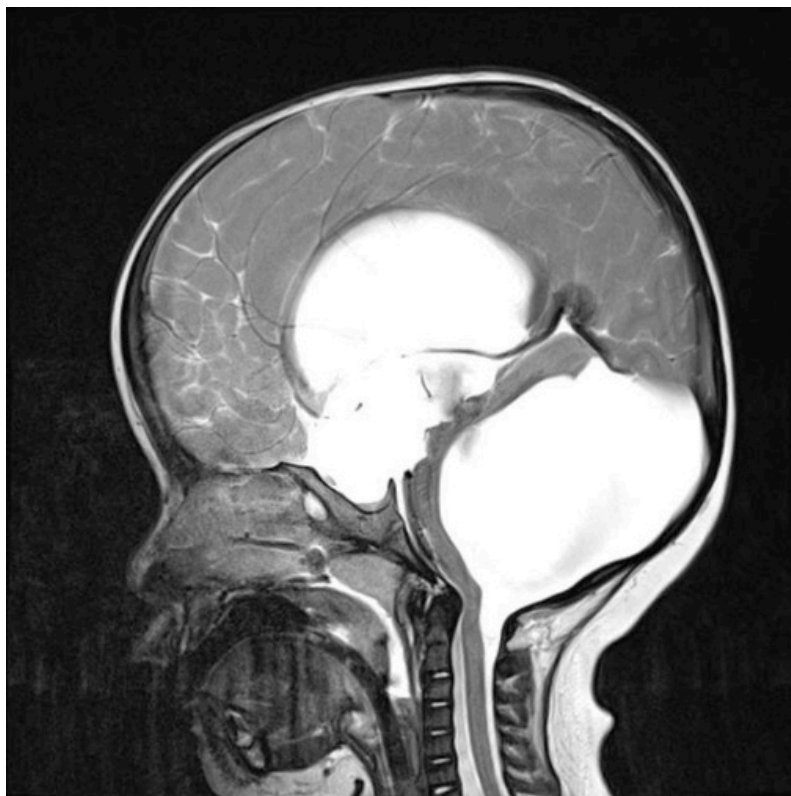
DAILY INFORMATION BULLETIN SERVICE

## CEREBELLAR PEDUNCLE

*The cerebral peduncles are the two stalks that attach the cerebrum to the brainstem. They are structures at the front of the midbrain which arise from the ventral pons and contain the large ascending (sensory) and descending (motor) nerve tracts that run to and from the cerebrum from the pons.*

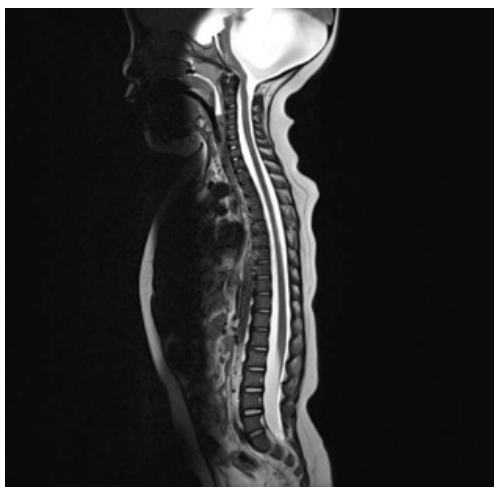
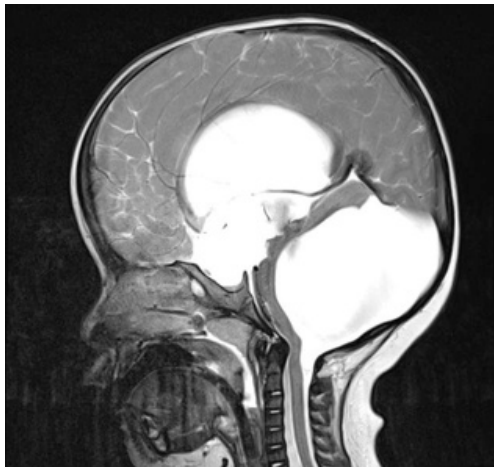


# VISUAL REFERENCE





# IMAGE DESCRIPTION



## **DANDY WALKER MALFORMATION**

*Dandy-Walker malformation (DWM) is the most common posterior fossa malformation, characterized by the triad of:*

- Hypoplasia of the vermis and cephalad rotation of the vermian remnant.*
  - Cystic dilatation of the fourth ventricle extending posteriorly.*
  - Enlarged posterior fossa with torcular-lambdoid inversion.*
- 
- In a classic Dandy-Walker malformation, patients usually manifest in the first year of life with symptoms of hydrocephalus and associated neurological symptoms.*
  - MRI is the modality of choice.*
  - A cystoperitoneal shunt could be considered in situations where hydrocephalus is a significant.*



# SUPERIOR CEREBELLAR PEDUNCLE

- ***It is a paired structure of white matter that connects the cerebellum to the midbrain.***
- ***It consists mainly of efferent fibers, the cerebellothalamic tract that runs from a cerebellar hemisphere to the contralateral thalamus, and the cerebellorubral tract that runs from a cerebellar hemisphere to the red nucleus.***
- ***It also contains afferent tracts, most prominent of which is the ventral spinocerebellar tract.***



# MIDDLE CEREBELLAR PEDUNCLE

- ***It is the largest, most lateral and only afferent peduncle.***
- ***The middle cerebellar peduncles, also known as the brachium pontis.***
- ***The corticopontocerebellar pathway is the predominant afferent fiber pathway that passes through the MCP.***



# INFERIOR CEREBELLAR PEDUNCLE

- ***The spinothalamic tract (STT) is a sensory tract that carries nociceptive, temperature, crude touch, and pressure from our skin to the somatosensory area of the thalamus.***
- ***The spinothalamic tract is composed of two adjacent pathways: anterior and lateral.***
- ***The anterior spinothalamic tract carries sensory input about crude touch.***
- ***The lateral spinothalamic tract carries information about pain and temperature.***
- ***Thus, they can be considered one pathway.***



# MCQ

## **Question:**

***Which of the following conditions occur due to the blockage of the medial or lateral apertures of the 4th ventricle during the development?***

- A. Rachischisis*
- B. Anencephaly*
- C. Syringomelia*
- D. Dandy-Walker syndrome*

***Ans - D.) Dandy-Walker syndrome***