

Brain: Miscellaneous

Chiari malformation

A Chiari malformation (formerly Arnold-Chiari malformation) is a congenital abnormality of the brain and skull, particularly the posterior fossa. In a Chiari malformation, the posterior fossa is “too small,” resulting in compression of the cerebellum and brainstem, with herniation of the inferior cerebellum (the cerebellar tonsils) down through the foramen magnum (Figure 15). This results in compression of the upper spinal cord and lower brainstem (medulla). Other features may include kinking of the upper brainstem, non-communicating hydrocephalus from stenosis of the aqueduct of Sylvius, and formation of a syrinx in the spinal cord. Symptoms include headaches, imbalance, swallowing difficulties, visual disturbances and many others.

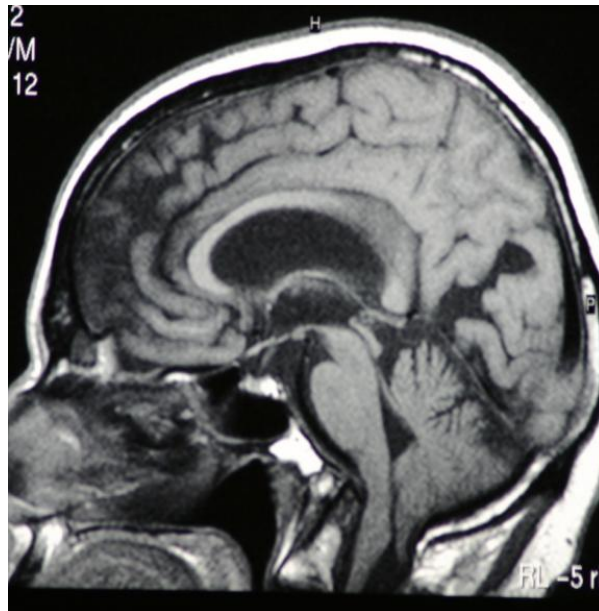


Figure 15: Chiari malformation. Note herniation of cerebellar tonsils and hydrocephalus.