



## The newer classifications of the chiari malformations with clarifications: An anatomical review.

Hamada Dajani, Ibraheem Qaisi, Nagham Joudeh, Amjad Elmashala, Nimer Adeeb, Joshua J. Chern, Fatima Azahraa Haddad, Fareed Jumah, R. Shane Tubbs

*Al-Najah National University School of Medicine, Nablus, Palestine.*

### Abstract:

In 1891, Hans Chiari described a group of congenital hindbrain anomalies, which were eventually named after him. He classified these malformations into three types (Chiari malformations I, II, and III), and four years later added the Chiari IV malformation. However, numerous reports across the literature do not seem to fit Chiari's original descriptions of these malformations, so researchers have been encouraged to propose new classifications to encompass these variants (e.g., Chiari 0, Chiari 1.5, and Chiari 3.5 malformations). Moreover, there is a continued misunderstanding and misuse of the term "Chiari IV malformation." Therefore, the current review intended to describe anatomical, pathophysiological, and clinical aspects of the newer classifications with clarifications of the Chiari malformations. We reviewed available literature about Chiari malformations and their variants using "PubMed" and "Google Scholar." We also looked into the term Chiari IV, clarifying its original description and citing examples where the term has been used erroneously. References in the reviewed articles were searched manually. Variants of the originally described Chiari malformations are termed Chiari 0, Chiari 1.5, and Chiari 3.5. Each has distinct anatomical characteristics and some of these are extremely rare and incompatible with life (e.g. Chiari 3.5). Chiari IV malformation has been further clarified. Some physicians might be unfamiliar with the newer classifications of Chiari malformations because these conditions are rare or even unique. Furthermore,



care is needed in using the term "Chiari IV malformation", which must be consistent with Chiari's original description, i.e. an occipital encephalocele containing supratentorial contents.

### Biography:

Hamada Dajani is a sixth year medical student at Al-Najah National University, he is a certified international human rights trainer. He has attended many international trainings and conferences regarding human rights and peace. He has published a review paper on Chiari malformation in the well reputed journal (Clinical Anatomy) and currently working on a research titled "Five year mortality rate of CABG patients".

### Recent Publications:

1. Hamada Dajani, et al; The newer classifications of the chiari malformations with clarifications: An anatomical review, 2018

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