

**PROGRESSIVE TETRAPARESIS WITH LATE ONSET, LUMBAR RELAPSING SCIATICA, CERVICAL AND LUMBAR SPINAL STENOSES, ASSOCIATED IN ADULTHOOD WITH VERTIGO AND ATAXIC PHENOMENA, DIAGNOSED WITH ARNOLD CHIARI MALFORMATION IN PRESENERESCENCE – COMPLEX CASE REPORT**

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## Abstract

**Introduction:** Arnold Chiari Malformation (ACM) is a congenital disorder which consists in a downward displacement of the cerebellar tonsils through the foramen magnum towards the spinal canal<sup>2,3</sup>. The term was first introduced in 1981 by the *Austrian* pathologist, *Hans Chiari*, with help from German anatomy professor, Julius Arnold. The *disease occurs* in only 1 in every 1.000 births with a female predominance. Based on the gravity of this malformation, the symptoms appear in the adolescence or adulthood<sup>1</sup>. This disorder appears to be due to a fetal developmental failure of the brain or the spinal cord, caused by a genetic mutation or a maternal diet that lacks certain nutrients; in exceptional cases, this can happen because of injury, infection or exposure to toxic substances. From an anatomical and morphological point of view, AMC can be classified in 4 types (I-IV), the most common being the first two<sup>1,4</sup>.

**Material and methods:** The authors want to bring attention to a case of a female patient (based on her signed inform consent), known from adolescents with idiopathic thoracic-lumbar scoliosis. In maturity the patient is progressively presented with muscle weakness, hypotonic tetraparesis type, with a paraparesis predominance; associated with balance troubles and coordination, vertigo, occipital headaches – episodes joined with nausea and tongue paresthesia. After the imagistic examination, the diagnosis has been established as type I Arnold Chiari Disease.

**Results:** The patient followed conservatory treatment recommended by the neurologist doctor (neurotropic drugs, peripheral vasodilator drugs, antiplatelet drugs, dietary *supplements*) and she is checked in annually at our Department in Eforie Sud including with complex rehabilitation treatment (heliotherapy sessions, hydro-/thermo-therapy procedures, antalgic electrotherapy, massage therapy and kinesiotherapy) with positive evolution by decreasing pain symptoms.

**Conclusions:** Medical management of patients with ACM is complex and requires the enablement of several doctors from different medicine fields (neurology, medical rehabilitation, orthopedics, medical imagistic), and the diagnostic of this disease must be taken into consideration if the patients develop: headache, lack of balance and coordination, vertigo, muscle weakness (sometimes associated with Hydrocephalus, Syringomyelia, Spina bifida or Kyphoscoliosis).

## References:

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