PULSUS
WWW.PULSUSCONFERENCE.COM

J Spine Neurosurg 2018, Volume 7
DOI: 10.4172/2325-9701-C3-018

Study of correlation between the radiological disappearance of Syrinx and clinical improvement in adults regarding motor deficits, sensory deficits, bowel and bladder dysfunction, after surgical decompression of Chiari malformation type 1 (CM1)

Ahmed Kamal Abdelaziz
Cairo University, Egypt

Chiari malformation type 1 is a disorder in which the cerebellar tonsils protrude through the foramen magnum and into the spinal canal. This anomaly is the leading cause of syringomyelia and occurs with or without associated osseous abnormalities at the craniovertebral junction. CM1 tends to present during or after the second decade of life. Overcrowding of the hindbrain by an underdeveloped posterior fossa commonly causes tonsillar ectopia in CM1. Magnetic resonance imaging has revolutionized the diagnosis of CM-1 and has led to the early detection of cases. These allowed the investigators to better understand the pathogenesis, clinical manifestations and response to treatment of CM1 and syringomyelia.To study the correlation between the radiological disappearance of syrinx and clinical improvement in adults regarding motor deficits, sensory deficits, bowel and bladder dysfunction, after surgical decompression of CM1.This is a prospective and retrospective study done on 20 patients at Cairo University Hospitals in the period between July 2017 and February 2018 fulfilling the inclusion criteria. Diagnosis was done clinically with history (pain, heaviness, etc.).The study included 20 patients, 13 females and 7 males, ages ranged from 13 to 65 years (mean age 25 years old). The most common clinical findings presented at diagnosis were headache followed by neck pain. The clinical outcome was assessed in which 14 patients (70%) reported good outcome, 4 patients (20%) reported fair outcome and 2 patients (10%) reported poor outcome. Of the 14 patients who reported good outcome 10 patients showed disappearance (50%) of the syrinx and the other 4 patients showed decrease in size (40%) with the 4 patients who reported fair outcome only 2 patients (10%) who reported poor outcome showed no change regarding the syrinx size.A favorable clinical outcome resulted after cranio-cervical decompression and duroplasty for CM1 malformation and syringomyelia. This outcome resulted from relief of spinal cord distension as the syrinx became smaller and did not require complete disappearance of syrinx fluid on MR images. Symptoms usually improve after surgery; residual signs and symptoms don't signal a failure of therapy, but rather confirm that the syrinx permanently injured the spinal cord before surgery.

ahmedkamalabdelaziz@gmail.com

Notes: