Definitions

**acute** - term used to describe a rapid onset, or progression, of a disease

**cerebellar tonsils** - portion of the cerebellum located at the bottom, so named because of their shape

**cerebellum** - part of the brain located at the bottom of the skull, near the opening to the spinal area; important for muscle control, movement, and balance

**cerebrospinal fluid (CSF)** - clear liquid which surrounds, and protects, the brain and spinal cord

**cervical** - the upper part of the spine, the neck area

**Chiari malformation** - condition where the cerebellar tonsils are displaced out of the skull area into the spinal area, causing compression of brain tissue and disruption of CSF flow

**decompression surgery** - common term for any of several variations of a surgical procedure to alleviate a Chiari malformation

**idiopathic** - due to an unknown cause

**laminectomy** - surgical removal of part (the bony arch) of one or more vertebrae

**magnetic resonance imaging (MRI)** - diagnostic test which uses a large magnet to create images of internal body parts

**syringomyelia (SM)** - neurological condition where a fluid filled cyst forms in the spinal cord

**syrinx** - fluid filled cyst in the spinal cord

**vertebra** - segment of the spinal column (see **Spinal Anatomy**)

Acute, Idiopathic Syringomyelia

Case Studies is a feature designed to highlight interesting patient cases reported in the research. Given the lack of knowledge about CM/SM, much of the published research comes in the form of case studies - doctors describing one or two patients they have seen and treated - as opposed to rigorous scientific studies. While this type of publication doesn't advance the scientific cause as much, it does give us a window into some of the issues surrounding CM/SM, including lasting side effects and related conditions. And hopefully, some of our readers will say, "Hey, that's just like me!" and know they are not alone in what they are going through.

**CASE 1: Acute Idiopathic Syringomyelia**

**Reported In:** Kaohsiung Journal of Medical Science, August, 2004

**Doctors:** Dr. June-Kai Chen et.al., Kaohsiung Medical University, Taiwan

**Patient:**
- 19 year old woman
- Went to the hospital after 2 days of arm weakness and trouble walking
- Symptoms appeared suddenly and progressed rapidly
- Neurological exam revealed abnormal reflexes and sensations in the arms and legs
- Blood tests were normal
- MRI revealed a syrinx from C2-C6, but no Chiari malformation
- There was no history of trauma or infection
- Patient underwent decompression surgery, including laminectomy of C1 and C3-C5
- During the operation, surgeons noted that the blood vessels in the C3-C5 were enlarged
- Patient participated in a one month comprehensive rehabilitation program
- Symptoms improved, syrinx size was reduced, but she continued to have right arm weakness and loss of sensation in her arms/hands

**Observations:**
- Authors believe this is the first published report of acute idiopathic syringomyelia
- Authors noted the engorged veins in the spinal area probably contributed to the formation of the syrinx but are not sure how

**Editor's Note:** This case is interesting for a couple of reasons. First, it is yet another example of "idiopathic" SM being treated, successfully, with decompression surgery. It would have been useful if the doctors had done a cine-MRI or measured the volume of her posterior fossa to see if there was crowding despite the lack of a Chiari malformation. Second, many doctors believe - with support of evidence - that idiopathic SM without symptoms is unlikely to become symptomatic; however, this case shows that careful observation is probably still needed as things can change for the worse quickly. Finally, the surgical finding of engorged veins - which has been noted by others - tends to support the theory on syrinx formation discussed in this issue: See New Theory Speculates That Compliance Is The Key To Syringomyelia.