

Commentary

In this article, the authors introduced a rare case of syringomyelia secondary to cervical spondylosis.^[1] Further, they performed literature review and discovered only 15 cases of other syringomyelia secondary to spinal cord compression. Although syringomyelia associated with Chiari malformation is occasionally encountered, these cases are extremely uncommon. Therefore, I guess this paper should be published because of rarity.

However, a couple of questions are still remaining unresolved.

It is broadly well known that syringomyelia associated with Chiari malformation sometimes causes scoliosis.^[2,3] The prevalence of scoliosis accompanied with syringomyelia was previously reported 2.8-25.8%.^[4-6] Whereas, the prevalence of syringomyelia secondary to spinal cord compression is unknown.

The authors speculated the pathophysiology of syringomyelia secondary to spinal cord compression by bibliographic consideration. But the discussion of pathophysiology of syringomyelia is also incomplete because most diseases by spinal cord compression do not always have syringomyelia. In the syringomyelia associated with Chiari malformation, overcrowding in the posterior cranial fossa due to a normal-sized hindbrain induces a downward herniation of the brain as well as occlusion of cerebrospinal fluid (CSF) flow across the foramen magnum.^[7] This obstructs natural flow of CSF and may be responsible for the origin and maintenance of syringomyelia by the pulsatile pressure waves forcing CSF into the spinal cord through the perivascular and interstitial spaces.^[8] Moreover, some syringomyelia associated with Chiari malformation are spontaneously diminishing. In scoliosis cases, Tokunaga *et al.*^[9] reported the size of syringomyelia associated with Chiari malformation decreased 50% or more in 14 of 27 cases in accordance with growth that promotes elevation of the tonsils.

The next step that we should do is accumulation of similar cases. Amassed data must contribute to properly elucidate prevalence, mechanism, and established

management of this disorder. I hope various questions with regard to this pathology will be solved in the future.

Hiroshi Kuroki

Department of Orthopaedic Surgery, University of Miyazaki, Miyazaki, Japan

Address for correspondence:

Dr. Hiroshi Kuroki,
Department of Orthopaedic Surgery, Faculty of Medicine, University of Miyazaki, 5200 Kihara, Kiyotake, Miyazaki - 889 1692, Japan.
E-mail: hiroshik@med.miyazaki-u.ac.jp

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