

We Are Cautious to Use the Term, ‘Split Cord Malformation Type 1.5’

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To the Editor,

We read the case report, ‘Type 1.5 split cord malformation: a new theory of pathogenesis’ written by Sun et al.³⁾, reporting two cases of ‘split cord malformation (SCM) type 1.5’ with great interest. We also had experience on such an incomplete form of SCM type 1. As Sun et al.³⁾ described, cases of SCM type 1.5 have previously been described and called as a ‘mixed’, ‘intermediate’, or ‘composite’ type of SCM. Sun et al.³⁾ suggested the term ‘SCM type 1.5’ for future use. However, we are cautious to use the term ‘SCM type 1.5’. Instead, we prefer to use the term, ‘incomplete form of SCM type 1’. The reasons are listed below.

Reason 1 : as we understood, ‘1’ and ‘2’ in SCM types 1 and 2 are categorical rather than numerical. SCM types 1 and 2 do not match with the grade of morphological severity. In terms of Chiari malformation, a classification into type 0 (syringomyelia without hindbrain herniation), type 1 (herniation of tonsils), type 1.5 (herniation of tonsils and brain stem without open neural tube defect), and type 2 (herniation of tonsils and brain stem with open neural tube defect) were suggested¹⁾ and this classification seems compatible with the grading of morphological severity. Perhaps in the aspect of grading morphological severity, Chiari type 1.5 is more acceptable than SCM

type 1.5.

Reason 2 : summary of the previously reported cases with SCM type 1.5 in the article of Sun et al.³⁾ showed an interesting finding. A larger portion of previously reported cases of SCM type 1.5 (including case 1 of Sun et al.³⁾) revealed no fibrous extensions from the tip of bony septum to the dura of the opposite side (ventral or dorsal side) and no fibrous tethering bands on the hemicords. We do not think this part (the other half with no bony septum) corresponds to SCM type 2. This part is normal (SCM type 0 will be correct rather than SCM type 2). Then it seems more reasonable to call these cases as a mixed form of type 0 and type 1. Should we call this ‘type 0.5’?

Reason 3 : Sun et al.³⁾ stated that “type 2 SCM should not regress from type 1 SCM” which suggested that SCM 1 and 2 are not in a spectrum of a single entity. To me, Sun et al.³⁾ seem to regard SCM type 1.5 as a variation of type 1, not of type 2. Then, the term ‘type 1.5’ is not adequate for a lesion which was regressed from type 1 but not from type 2. ‘Type 1.5’ sounds like a real intermediate form between type 1 and type 2. According to idea of Sun et al.³⁾, the lesions should be called as a variant of type 1 rather than an intermediate form. We agree that the same problem is applied to Chiari type 1.5 which is believed to be an advanced form of Chiari 1 malformation²⁾.

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AUTHORS' DECLARATION

Conflicts of interest

No potential conflict of interest relevant to this article was reported.

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