Comment on: The value of post-operative MR in tethered cord: a review of 140 cases by P. David Halevi, Suhas Udayakumaran, Liat Ben-Sira, Shlomi Constantini

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Introduction

The postoperative management of children operated on for occult spina bifida is a controversial subject. One of the main discussed points is the reliability of postoperative MR imaging in helping to define the success of the surgical detethering of the spinal cord. The terminal part of the spinal cord most frequently maintains a low position after surgery, this finding being agreed as not representing itself an issue for reoperating the affected patients. MR has a clinical cost for the baby, many children still requiring an anesthesiological procedure and an economic/availability cost not to be overlooked especially in less developed countries.

On the other side, to faith only on clinical grounds could not be without risks. Symptoms and signs though roughly investigated with seriated urological, orthopaedic and clinical neurological, so as neurophysiological exams, might be subtle and their interpretation subjective, with the possibility of missing an evolving disease.

The paper by Halevi et al. further challenges this discussion. In the authors' experience, the routine use of a midterm (6–18 months) postoperative MR in children

operated on for an occult spina bifida provided results to be taken into consideration only in 5.7% of the cases (8/40 patients) and did not lead to surgery in any of them.

A point which certainly raises discussion is that all occult spina bifida patients observed at the authors' institution underwent the same protocol, around 30% of them being represented by children operated on for a filar lipoma, a clinical entity on which more extensive agreement exists on not performing a routine postoperative neuroradiological investigation. Though embryologically joined by the same age of development of the defect, the surgical management of occult spina bifida defects is not considered the same for all of them worldwide; for example, transitional lipomas or higher grade diastematomyelia defects might require surgical considerations which are different from those that are taken into consideration for simple filar/terminal lipomas.

We asked comments to the paper by Halevi et al. to distinguished colleagues experienced in the field of occult spina bifida worldwide. These comments are published immediately following the paper that is hereby proposed for the Controversy in Neurosurgery section of the journal.

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