Spinal segmental sensitization and chronic pain after hip dislocation in a child with spastic quadriplegia: A case report

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ABSTRACT
Spinal Segmental Sensitization is related to a hyperactive state of a spinal segment due to an irritative source, which is constantly sending stimuli to the dorsal ganglion.

Objective: To show Spinal Segmental Sensitization condition present in a severe spastic quadriplegic child with hip dislocation.

Method: We report a 12-year-old boy with severe spastic quadriplegia and mental retardation, GMFCS V. A valgus osteotomy relieved a painful right hip dislocation, but it appeared again 10/10 on the Visual Analogue Scale diagram on any significant motion of the right hip, interfering in basic care, and spasticity worsened. Pain management was initiated with oral analgesic plus physical therapy, without significant pain relief. At physical examination, signs of Spinal Segmental Sensitization were found on right methameric L4. We performed a Paraspinous Block at that level according to the technique described. VAS face diagram based on his mother's assessment, passive lower limb realignment and Modified Ashworth Spasticity scale were measured before and after the procedure.

Results: Immediately we observed significant pain relief, diminished spasticity and easy realignment of the involved limb.

Discussion: In this case, this boy had a condition we think is responsible for triggering Spinal Segmental Sensitization. We propose that these clinical findings should be sought and their management encouraged in this kind of patient, achieving direct impact on their quality of life.

Key words: Spinal sensitization, chronic pain, infiltration.