

LETTER TO THE EDITOR

A few comments on a few articles

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May I comment on some of the articles published in the last January issue of *Spinal Cord*. As Wyndaele¹ noted in his Editor's Page, the standard of the clinical researches which try to understand why, yet, there is no real functional regeneration of the damaged cord, improve constantly, but, alas, there is no 'cure for paralysis'. Vihanski² called this enigma: 'The Search of the Lost Cord'. Silver³ reviewed extensively the History of the Treatment of Spinal Injuries. Beyond historical background and modern scientific approaches we remain with the basic horrible unsolvable enigma, that there is no practical way to reconnect the severed billions of neurons and axons. We all stay in pray and hope.

As of now, there is no cure for nerve (or muscle cell) damage. To prevent secondary damage, steroids such as methylprednisolone can reduce the swelling and other biochemical changes that results from spinal cord injury, and Sygen, perhaps can reduce the loss of nerve function.

Explored here are four ways that scientists are trying to regenerate nerves *in vivo* http://biomed.brown.edu/Courses/BI1108/BI1108_2001_Groups/Nerve_Regeneration/Introduction/Introduction.htm:

- (1) Guidance channels
- (2) Stem cells
- (3) Growth factors
- (4) Gene therapy

Ten years ago, Tang⁴ had concluded that: 'Finally, how may these and future advances in our knowledge on the signaling mediators and mechanisms of neurite growth inhibitors be clinically useful? It is clear that CNS regeneration is a multi-faceted problem, and workable therapeutic strategies would involve a combination of attempts to enhance the intrinsic ability of axons to grow and re-innervate as well as neutralization of the plethora of inhibitors found in their path. Knowing the signaling mechanisms opens up possibilities of testing the collection of known (and the screening for novel) small molecule

antagonists derived against the various signaling molecules (with other clinical indications) in animal models of CNS injury.'

The article of West *et al.*,⁵ reminded me our old report on Pulse volume recording disturbances in paraplegic patients. Spinal cord injuries may modify vascular reactivity in the denervated region. This study presents an original observation of altered vascular response in paraplegic patients. The altered pulsatility demonstrated in most of those paraplegic patients may have a role in deficient wound healing frequently observed below the level of spinal neurological loss.⁶ The article on ACJ arthrosis in persons with spinal cord injury did not mention our observation on the various shoulders' problems among people with spinal cord injury.⁷

CONFLICT OF INTEREST

The author declares no conflict of interest.

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- 2 Vihanski L. *In search of the lost cord*. Joseph Henry Press: Washington DC, 2001.
- 3 Silver JR. *History of the treatment of spinal injuries*. Kluwer Academic/Plenum Publishers: NYC, Boston, etc., 2003.
- 4 Tang BL. Review: Inhibitors of neuronal regeneration: mediators and signaling mechanisms. *Neurochem Int* 2003; **42**: 189–203.
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- 6 Walden R, Bass A, Ohry A, Schneiderman J, Adar R. Pulse volume recording disturbances in paraplegic patients. *Paraplegia* 1991; **29**: 457–462.
- 7 Ohry A, Brooks ME, Steinbach TV, Rozin R. Shoulder complications as a cause of delay in rehabilitation of spinal cord injured patients. (Case reports and review of the literature). *Paraplegia* 1978; **16**: 310–316.