

**Johansson B. Whiplash injuries can be visible by functional magnetic resonance imaging. Pain Res Manage 2006;11:197-9**

Dear Dr Craig:

I read Johansson's article on functional magnetic resonance imaging with interest. This particular investigation proved to be of immense value in the diagnosis and treatment of the three selected patients who were involved in significant motor vehicle accidents, and who developed compelling symptoms of cervicencephalic syndrome.

As a series of case studies, however, the article has limitations. In particular, there are insufficient data to address the thorny issues of false-positives, false-negatives and predictive values (both positive and negative).

Nonetheless, the potential benefits of functional magnetic resonance imaging in selected patients are obvious. Just yesterday, I saw a self-employed bricklayer who had been unemployed since November 2005, when he fell off a ladder from a height of approximately 20 feet. Among his presenting complaints were headache, visual disturbances, impaired balance, and memory, urinary hesitancy, right facial pain, difficulty sleeping, as well as right arm and hand pain. After reviewing Johansson's article, I will ensure that he is properly assessed with respect to injuries involving the joint capsules (C0 to C2), as well as the alar ligaments.

However, the accompanying editorial was less useful. For clinicians struggling with the appropriate clinical interpretation of whiplash symptoms (whiplash-associated disorders), the title of the editorial: 'Whiplash can have lesions' is self-evident. Nevertheless, the corollary is also true: whiplash may not have lesions. Furthermore, the

majority of individuals presenting with whiplash symptoms are appropriately restrained/positioned and are subjected to far less trauma. Finally, there is usually scant evidence of a bona fide cervicencephalic syndrome.

In these latter instances, there may be no biomedical diagnosis available, and yet, the editorial suggests 'although it may be attractive and convenient to apply a psychological diagnosis, doing so is neither reliable nor valid'; the author apparently attempts to 'underscore the frailty of the psychosocial model of whiplash-associated disorder'.

Without any doubt, a psychosocial interpretation of the clinical presentation in the three selected cases of Johansson's article would have been inappropriate. Conversely, in many cases of less severe neck trauma (particularly in the context of florid pain behaviours and inconsistencies), a psychosocial interpretation is not at all inappropriate.

In my view, the editorial does a disservice to clinicians by implying that because a specific tissue diagnosis is established in the three selected patients of Johansson, it must therefore be so in all other cases. In reality, what is a probability in one clinical context may just be a remote possibility in the next. One's clinical interpretation of any given patient should never be subverted by an uncritical application of some generalization that may itself be unreliable and invalid beyond its own unique context.

*Dr John C Clifford*

*Department of Physical Medicine and Rehabilitation*

*University of Western Ontario*

*London, Ontario*