

## Correspondance

## Acute muscle spasm

In a *CMAJ* research letter, Norman Epstein described 8 patients with acute muscle spasm.<sup>1</sup> The diagnosis appears to have been based on subjective measurements of range of motion and pain; Epstein did not state how range of motion and tenderness were measured.

There is no proof that pain symptoms or decreased range of motion result directly from abnormality or spasm of muscles. There is no gold standard for diagnosing paralumbar spasm. There is no electrodiagnostic test or other objective investigation to prove that muscles are abnormal. There is also no medical literature proving that muscle spasm, especially paralumbar spasm, can be diagnosed clinically with scientific validity or reliability.

As E.W. Johnson writes, "In spite of overwhelming evidence that skeletal muscle spasm is nonexistent, physicians are continually deluged with seductive ads to prescribe expensive muscle relaxants."<sup>2</sup> I agree that a randomized, blinded, placebo-controlled trial is needed to corroborate the findings in this case series.

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## References

1. Epstein NL. Benzotropine for acute muscle spasm in the emergency department. *CMAJ* 2001;164(2):203-4.
2. Johnson EW. The myth of skeletal muscle spasm. *Am J Phys Med Rehabil* 1989;68:1.

There is evidence that pain symptoms or limitations of movement can be attributed to muscle spasm: Zhu and colleagues recently concluded that "the close correlation among evoked potentials, paraspinal muscle spasm and clinical symptoms suggest that the measurement of muscle activity may be more important to low back pain than is commonly accepted."<sup>1</sup>

My study was not based on a subjective diagnosis of pain and range of mo-

tion. As noted in my article, I measured pain using an authenticated visual analogue scale and I used a standard clinical examination to determine range of motion.<sup>2</sup> I did not measure "tenderness."

Involuntary muscle spasm (dystonia) has been extensively studied by neurologists and neurophysiologists. It has been treated with some success with anticholinergics and other therapeutics, particularly botulin toxin.<sup>3-6</sup>

On a purely practical and clinical level, muscle spasm remains an important cause of patient suffering. Alleviating that suffering, by non-narcotic means if possible, is the bottom line. Perry Rush and I are in agreement that this case series must be put through the rigours of a randomized controlled trial before benzotropine becomes the standard of care, as I suggested in my article.<sup>2</sup>

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## References

1. Zhu Y, Haldeman S, Hsieh CY, Wu P, Starr A. Do cerebral potentials to magnetic stimulation of paraspinal muscles reflect changes in palpable muscle spasm, low back pain, and activity scores? *J Manipulative Physiol Ther* 2000;23(7):458-64.
2. Epstein NL. Benzotropine for acute muscle spasm in the emergency department. *CMAJ* 2001;164(2):203-4.
3. Goetz CJ, Pappert EJ. Trauma and movement disorders. *Neurol Clin* 1992;10(4):907-19.
4. Schott GD. The relationship of peripheral trauma and pain to dystonia. *J Neurol Neurosurg Psychiatry* 1985;48:698-701.
5. Jankovic J. Post-traumatic movement disorders: central and peripheral mechanisms. *Neurology* 1994;44:2006-14.
6. Lang AE, Sheehy MP, Marsden CD. Acute anticholinergic action in focal dystonia. *Adv Neurol* 1983;37:193-200.

## Just a family doc

As a first-year family practice resident in British Columbia, I was not surprised by this year's residency match results.<sup>1</sup> Throughout my medical school training, family medicine was looked down upon as a career. Physicians in specialty areas would often dis-

parage the "family doctor" who did a poor job managing a case. Worse off were rural family physicians, who were often criticized openly because of delays in care or lack of knowledge. Sadly, when asked their specialty by medical students, family physicians would almost invariably reply, "I'm just a family doctor."

I chose this residency only because I entered medical school knowing I wanted to practise family medicine. Once I began my medical education I did not receive any encouragement to pursue this path until I actually spent time in a family practice elective.

Unless attitudes toward family medicine change in our academic training centres, we can expect an American-style system, where specialists outnumber family physicians. Perhaps then a better appreciation of primary care will emerge.

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## Reference

1. Sullivan P. Family medicine loses lustre as students "vote with feet" in 2001 residency match. *CMAJ* 2001;164(8):1194.

## Exploring the actions of vitamin C

Vitamin C is an antioxidant with significant physiologic actions. For instance, it has been reported to lower erythrocyte sorbitol concentrations, which may make it useful in treating diabetes.<sup>1</sup> Data from the 3rd National Health and Nutrition Examination Survey showed that mean serum vitamin C concentrations were significantly lower in people with newly diagnosed diabetes than in people who did not have diabetes,<sup>2</sup> lending support to the earlier belief that diabetes mellitus may be associated with decreased serum vitamin C concentrations. These results