

LETTERS

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- 1 Parker MH, Wilkinson D. Dealing with "rogue" medical students: we need a nationally consistent approach based on "case law". *Med J Aust* 2008; 189: 626-628.
- 2 Baron-Cohen S. What is empathizing? In: *The essential difference*. New York: Basic Books, 2003: 21-28.
- 3 Douglas C. Dr A will see you now. *BMJ* 2005; 331: 1211.
- 4 Oakley B. *Evil genes*. New York: Prometheus Books, 2008. □

Influenza, marksmanship and the last gasps of the Great War

Timothy JJ Inglis

TO THE EDITOR: Controlled breathing is a fundamental principle of marksmanship. I describe an effect of viral lower respiratory tract infection on small arms training that was unexpectedly prolonged.

The patient (myself) had abrupt onset of respiratory infection, 1 day after a marksmanship training session on an electronic firing range. During the session, I obtained satisfactory scores from several firing positions (best score, 66 mm grouping for 20 shots, at 200 m, prone firing position). The illness progressed rapidly from a non-specific prodrome to a flu-like illness with fever, malaise, muscle aches, lethargy, slowed cognition, cough, sore throat, rhinorrhoea, persistent lacrimation and a 24-hour period of prostration. Recovery began after 48 hours, allowing a

return to light work at 72 hours and full working duties by Day 7.

On Day 14, during another marksmanship training session, my accuracy was severely decreased. I failed to obtain satisfactory scores in any position because of persistent erratic breathing and occasional involuntary coughing (best score, 235 mm grouping for 20 shots at 200 m). Spirometry later that day showed a reduced peak flow rate (310 L/min) (see Box). Serological tests were negative for IgG and IgA for all respiratory agents assessed. Nasal swabs were positive for parainfluenza virus type 3 by polymerase chain reaction testing.

Involuntary coughing, particularly towards the end of the day, and decreased exercise tolerance persisted for a further 2 weeks, by which time peak flow had increased to 500 L/min. A third marksmanship session the week afterwards showed an improvement in scores, but they were still worse than those obtained pre-infection. Notably, grouping deteriorated rapidly after the first series of 20 shots, and could not be regained even after short rests. Replay of the recorded laser beam pattern for the session indicated that the breathing pattern remained erratic, although peak flow had risen further to 550 L/min.

In the aftermath of the First World War, the joint head of Germany's forces, Ludendorff, claimed that the failure of his 1918 spring offensive was ultimately caused by epidemic influenza.¹ The epidemic affected German troops later than the allied forces, in June 1918. By July 1918, there were an estimated 500 000 German influenza casualties. Ludendorff's initial successes were a result of new, highly mobile type infantry tactics — the forerunner of today's "fire and movement" — which require physical fitness, stealth and accuracy of rifle fire.

My case demonstrates that the tactical consequences of a viral lower respiratory infection can last much longer than medically explicit morbidity. Prolonged effects in my case included persistent involuntary cough, loss of exercise tolerance and loss of marksmanship, weeks after the initial acute illness. Ludendorff's claim may be not so far off the mark.

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The medical and retrieval costs of road crashes in rural and remote northern Queensland, 2004–2007: findings from the Rural and Remote Road Safety Study

Susan M Gorton

TO THE EDITOR: I read with interest the research article by O'Connor and colleagues, which concluded that the medical and retrieval costs of road crashes in rural and remote northern Queensland represent "a considerable economic burden".¹ Although the authors noted that the broader Rural and Remote Road Safety Study aimed to also gain an understanding of the social costs of such crashes, they focused on the monetary costs in this report.

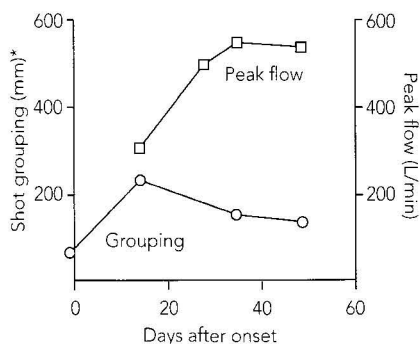
As we all know, road crashes not only cost money but have enormous personal impact, in both the short and long term, on the patients and their families. This impact is likely to be even greater for patients from rural and remote areas who are unable to be cared for in their local hospital. Remember that for almost all patients transferred, there are families who must also find their way to, and temporary accommodation (sometimes for months) in, an unfamiliar large town or city. Close family members, in addition to the patient, also suffer loss of income, disruption of schooling, and loss of personal network support due to the geographic dislocation.

Thank you to the authors of this study, which reinforces the desperate need to continue to improve local health services in rural and remote Australia, including "more efficient trauma management",¹ to contain costs and to lessen patient and family suffering.

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- 1 O'Connor TM, Hanks HA, Elcock MS, et al. The medical and retrieval costs of road crashes in rural and remote northern Queensland, 2004–2007: findings from the Rural and Remote Road Safety Study. *Med J Aust* 2009; 190: 54-56. □

Marksmanship scores* and peak flow rates over time after onset of a respiratory tract infection



* Lower scores for shot grouping indicate better marksmanship (shots are more closely grouped). ♦

- 1 Barry JM. *The great influenza. The epic story of the deadliest plague in history*. 2nd ed. London: Penguin, 2007. □