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## Correspondence

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*Epidemiol. Infect.* (2017).

doi:10.1017/S0950268817001765

First published online 14 August 2017

**Letter to the Editor: New guidelines about tetanus vaccination schedules in Europe should be evaluated with caution**

**Comment on: Tetanus vaccination, antibody persistence and decennial booster: a serosurvey of university students and at-risk workers. By Borrella-Venturini *et al.***

**To the Editor:** The recent paper by Borella-Venturini *et al.* [1] gives us an opportunity to discuss the guidelines about tetanus vaccination in France and Europe. In France, the vaccination schedule was updated in 2013 to a 20-year-interval between booster shots of tetanus vaccine in adults [2]. However, the risk–benefit balance of these new guidelines needs to be carefully evaluated, following a case of tetanus in a ‘vaccinated-as -recommended-patient’.

A 50-year-old man came to the emergency unit of Brignoles, France, for abnormal movements. His left heel had been wounded by a rusty nail while walking in a field 15 days before. His last vaccination for tetanus was in 1999 at the age of 33, 17 years previously.

The wound was cleaned 24 h later but became inflamed. Eight days after the injury, he felt cramps in the left leg. He then developed bilateral dyskinesia of upper and lower limbs and went to the emergency unit because of dysphagia and trismus with limitation of mouth-opening at 2 cm. Upon examination, the gag reflex was exacerbated. The wound on the left heel was almost completely healed. The cerebral CT scan was normal and no biological abnormality existed in standard blood analysis. Quick test for tetanus Ig was negative and the patient was subsequently referred to our centre for treatment. Injection of human tetanus immunoglobulin was performed (3000 IU, intramuscularly and around the wound). He was also treated with metronidazole 500 mg intravenously three times a day and given a booster

of anti-tetanus vaccine. The patient was transferred in the intensive care unit for monitoring. He improved within 48 h with progressive disappearance of the trismus and the abnormal movements of the limbs. He was discharged from the hospital 2 days after returning from the intensive care unit to the infectious diseases ward.

This case is in line with the results of Borella-Venturini *et al.* [1], which show that the proportion of unprotected individuals correlates with the time since the last vaccine dose, with 16·1% of unprotected individuals receiving the last dose more than 15 years before [1]. Our patient belonged to this group with a last vaccination booster shot performed 17 years earlier.

European guidelines for tetanus vaccination in adults are highly heterogeneous, from Italy still recommending a decennial booster shot to the UK that does not vaccinate systematically after the age of 14. However, they do stress the need for prophylaxis in tetanus-prone wounds [3, 4]. Further cautious evaluation of national guidelines should help in harmonizing European Guidelines concerning the interval for anti-tetanus vaccine booster shots. Moreover, our case should remind French clinicians that preventive measures and diagnosis of tetanus should be invoked in the group of patients vaccinated more than 15 years ago.

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