To the Editor: Cutaneous diphtheria in a migrant from an endemic country in east Africa, Austria May 2014

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To the editor:
In their recent article, Both et al. pointed out that the unavailability of diphtheria antitoxin (DAT) constitutes a risk for patients presenting with diphtheria across Europe and may hamper diphtheria diagnostics [1].

In Austria, DAT is also no longer available since 2011. However, 21 years after the last documented Austrian case of diphtheria due to toxigenic Corynebacterium diphtheriae, an east African teenager was diagnosed with cutaneous diphtheria in May 2014. He had been hospitalised on 25 April, after arriving in Austria via Italy, for secondary infected skin wounds with impetigo appearance mainly on extremities and treated with intravenous ampicillin/sulbactam (3 g i.e. 2 g ampicillin/1 g sulbactam every 8 hours for 7 days). On admission, he had a total white blood cell count of 13.7 x 10⁹ /L (norm: 3.8-9.8 x 10⁹ /L), neutrophils 10.33 x 10⁹ /L (norm: 1.5-7.0 x 10⁹ /L), and a C-reactive protein of 2.73 mg/dL (norm: < 0.5 mg/dL). The wound swab taken from a leg ulcer on 25 April yielded C. diphtheriae, Staphylococcus aureus and Streptococcus dysgalactiae equisimilis (Lancefield group C). Microbiological diagnosis was hampered by delays in specimen transport and reporting of results; the Diphtheria-Reference Laboratory received the isolate on 19 May.

The World Health Organization (WHO) Global Reference Centre for Diphtheria and Streptococcal Infections at Public Health England (PHE), London, United Kingdom, confirmed the isolate as toxigenic C. diphtheriae, an east African teenager was diagnosed with cutaneous diphtheria in May 2014. He had been hospitalised on 25 April, after arriving in Austria via Italy, for secondary infected skin wounds with impetigo appearance mainly on extremities and treated with intravenous ampicillin/sulbactam (3 g i.e. 2 g ampicillin/1 g sulbactam every 8 hours for 7 days). On admission, he had a total white blood cell count of 13.7 x 10⁹ /L (norm: 3.8-9.8 x 10⁹ /L), neutrophils 10.33 x 10⁹ /L (norm: 1.5-7.0 x 10⁹ /L), and a C-reactive protein of 2.73 mg/dL (norm: < 0.5 mg/dL). The wound swab taken from a leg ulcer on 25 April yielded C. diphtheriae, Staphylococcus aureus and Streptococcus dysgalactiae equisimilis (Lancefield group C). Microbiological diagnosis was hampered by delays in specimen transport and reporting of results; the Diphtheria-Reference Laboratory received the isolate on 19 May.

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Conflict of interest
None declared.

Authors’ contributions
SH, SH, AF and Al wrote the draft manuscript. VZ and PH performed bacteriological work. HS and RM provided clinical data. All authors corrected and approved the final version.

References