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LETTERS

Nontoxigenic *Corynebacterium diphtheriae* Infections, Europe

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To the Editor: We read with interest the article by Dangel et al. analyzing nontoxigenic *Corynebacterium diphtheriae* infections in northern Germany during 2016–2017 (*1*). Among the cases, 2 patients originated from Poland; each experienced an invasive disease, 1 endocarditis and 1 sepsis. Poland and Germany are neighboring countries. In Poland, we also observed an accumulation of nontoxigenic *C. diphtheriae* infections during 2016–2017. In both countries, most infections were caused by isolates belonging to sequence type (ST) 8 biotype gravis, which we previously suspected of having increased pathogenic properties (*2*).

ST8 has been causing infection in Poland since 2004 and was isolated in Russia before that (*2*,*3*). However, the first ST8 isolate was not obtained in northern Germany until 2015, suggesting spread of pathogenic ST8 from eastern to western Europe. Comparing epidemiologic data from Poland during 2012–2017, we confirmed 48 cases of nontoxigenic *C. diphtheriae*, increasing from 3 cases in 2012 to 20 in 2017. As seen in northern Germany, most affected patients in Poland were male (>80%), and ≈30% of patients were homeless, alcohol addicted, or both. We did not identify HIV as a risk factor. We saw a sharp increase in cases during the time of the Dangel et al. report as well, from 10 cases in 2016 to 20 in 2017. Nevertheless, in Poland, 40% of isolates (19/48) during 2012–2017 were obtained from invasive infections, whereas in Germany only 9 isolates (≈12%) were obtained from cases with severe invasive complications. None of the cases in Poland were related epidemiologically.

We hypothesize that pathogenic ST8 could spread to other countries in Europe in a few years and that persistence of ST8 isolates in the population might be related to increases in the number of invasive infections. The scale of the problem of nontoxigenic *C. diphtheriae* infections in Europe remains unknown because only toxigenic infections are registered. Lack of registration leads to lack of prevention and, thus, to outbreak development and spread.

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Racial/Ethnic Disparities in Antimicrobial Drug Use, United States, 2014–2015

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To the Editor: We read with interest the article by Olesen and Grad (*1*), which reported that, in the United States during 2014–2015, the rate of antimicrobial drug use by white persons was twice that of persons of other races. The authors did not relate this finding to previous reports of ≈2 times lower incidence of sepsis (*2*) and ≈1.5 times lower incidence of death from infectious diseases (*3*) in white persons in the United States.

A national study of community antibacterial dispensing in relation to ethnicity in New Zealand (*4*) found that the dispensing rates were highest in Pacific people and Maori, consistent with their higher incidence of infectious diseases. However, the ethnic disparities in dispensing rates were substantially less than the ethnic disparities in the incidence of some infections. For example, even though the incidence of hospitalization for rheumatic fever was 63 times higher for Pacific people and 27 times higher for Maori than for persons of all other ethnicities combined, the annual dispensing rates of penicillins for Pacific people and Maori were <1.5 times higher than in other ethnicities.

Olesen and Grad suggest that ethnic disparities in antimicrobial drug use will lead to disparities in the prevalence of colonization (and disease) by antimicrobial-resistant bacteria. The New Zealand study found that dispensing rates of topical antimicrobial agents (predominantly fusidic acid) for Pacific and Maori children were approximately twice those for children of other ethnicities and suggested that these high dispensing rates might have contributed to the higher proportion of staphylococcal infections caused by methicillin-resistant (and fusidic acid–resistant) *Staphylococcus aureus* in Pacific people and Maori (*5*). We suggest that improved understanding of ethnic disparities in the incidence of infectious diseases and in the level of consumption of antimicrobial agents might usefully inform antimicrobial stewardship targets and strategies.

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