CTX-M-27-Producing Escherichia coli of Sequence Type 131 and Clade C1-M27, France

André Birgy, Philippe Bidet, Corinne Levy, Elsa Sobral, Robert Cohen, Stéphane Bonacorsi

Author affiliations: Institut National de la Santé et de la Recherche Médicale, Paris, France (A. Birgy, P. Bidet, S. Bonacorsi); Université Paris Diderot, Paris (A. Birgy, P. Bidet, S. Bonacorsi); Hôpital Universitaire Robert-Debré, Paris (A. Birgy, P. Bidet, S. Bonacorsi); Association Clinique Thérapeutique Infantile du Val de Marne, Saint Maur des Fossés, France (C. Levy, E. Sobral, R. Cohen); Groupe de Pathologie Infectieuse Pédiatrique, Paris (C. Levy, R. Cohen); Centre Hospitalier Intercommunal de Créteil, Créteil, France (C. Levy, R. Cohen); Université Paris-Est Créteil, Créteil (C. Levy, R. Cohen)

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To the Editor: We read with great interest the Matsumura et al. paper describing extended-spectrum β-lactamase (ESBL) CTX-M-27–producing *Escherichia coli* of sequence type (ST) 131 clonal group, an emerging clade called C1-M27 (*I*). ST131 *E. coli* having $bla_{\text{CTX-M-27}}$ has been described in several countries. We observed an alarming increase of this clonal group in the fecal carriage of children in France (0% in 2010 to 65% in 2015 among ESBL-producing ST131 *E. coli*) (2).

We wondered whether this clonal group's expansion in France was attributable to the same clade (C1-M27). For that, we designed primers (M27PP1-B-F, 5'-TTACTCC-GACTATGCGTTCAC-3'; M27PP1-B-R, 5'-CAAACTT-GCCCCTGATAGCG-3'; amplicon length, 1.5 kb) to amplify the insertion site of the structure comprising the direct repeat and prophage-like genomic island of E. coli PCN033, as previously described (1). PCR was performed on our recently described collection of 39 ESBL-producing ST131 E. coli, including 16 CTX-M-27-producing E. coli: 13 of subgroup O25b with fimH30 allele and 3 of O16 subgroup with fimH41 allele (2). Results showed that 81% (13/16) of the CTX-M-27– producing E. coli ST131 had the M27PP1 structure, similar to strain PCN033, and thus belong to the C1-M27 clade. Therefore, the C1-M27 clade found in Asia and America is also present in Europe in the fecal flora of young children. The 3 isolates belonging to the O16 subgroup with fimH41 lacked M27PP1, suggesting that $bla_{CTX-M-27}$ might diffuse among non-H30 ST131 E. coli without this prophage-like genomic island. Finally, the non-CTX-M-27-producing ST131 E. coli of our collection were negative for M27PP1 elements.

Our results show that CTX-M-27-producing *E. coli* ST131 subgroup O25b with *fimH*30 allele (one third of the

ESBL-producing ST131 carriage isolates) isolated from children in France belong to C1-M27 and that CTX-M-27–producing O16 strains display distinct genetic characteristics. Altogether, our data confirm the worldwide distribution of C1-M27 and its high prevalence in children in France.

References

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Address for correspondence: Stéphane Bonacorsi, Hôpital Robert-Debré, Assistance Publique Hôpitaux de Paris, 48, boulevard Sérurier F75019 Paris, France; email: stephane.bonacorsi@aphp.fr

Antimicrobial Drug Resistance among Refugees from Syria, Jordan

Aula Abbara, Nizar Al-Harbat, Nabil Karah, Bashar Abo-Yahya, Wael El-Amin, James Hatcher, Omar Gabbar

Author affiliations: Imperial College, London, UK (A. Abbara); Syrian American Medical Society, Canfield, Ohio, USA (A. Abbara); Al Maqased Charity Hospital, Amman, Jordan (N. Al-Harbat, B. Abo-Yahya); Umea University, Umea, Sweden (N. Karah); Broomfield Hospital, Chelmsford, Essex, UK (W. El-Amin); Imperial College Healthcare National Health Service Trust, London (J. Hatcher); University Hospital Leicester, Leicester, UK (O. Gabbar)

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To the Editor: The Kassem et al. article regarding high rates of multidrug-resistant (MDR) bacteria colonizing Syrian children highlights the challenge of choosing empiric antimicrobial drugs to treat war-injured refugees from Syria (1). The findings mirror other reports (2,3) and our own experience in a charitable hospital in Amman, Jordan, which manages war-injured refugees from Syria. As part of a program of antimicrobial drug stewardship and infection prevention and control, empiric antimicrobial drug protocols were introduced. For antimicrobial