Clinical Relevance of Campylobacter concisus Isolated from Pediatric Patients

Zhang et al. (6) presented data on the isolation and identification of *Campylobacter* species other than *C. jejuni* from biopsy specimens from children with Crohn's disease. Their data indicated that *Campylobacter concisus* is associated with inflammatory bowel disease in children. We also detected a case of inflammatory bowel disease associated with *C. concisus* isolated from a gastric biopsy specimen from a 10-year-old boy. The identity of the organism was confirmed as *C. concisus* by phenotypic and DNA-DNA hybridization studies (4). Retrospective analysis of adult and pediatric patient records indicated that *C. concisus* had been isolated from the stool specimens of four adults (one male; ages of 25 to 51 years) and two children (both males; ages of 11 and 12 years) diagnosed with Crohn's disease or ulcerative colitis (A. Lastovica, unpublished results).

Since 1990, over 2,000 isolates of C concisus have been isolated from pediatric diarrheic stool samples (3; Lastovica, unpublished) and from several pediatric blood culture specimens (3) at the Red Cross Children's Hospital (RXH) in Cape Town, South Africa. The isolation of C. concisus and Campylobacter species other than C. jejuni and C. coli was accomplished by the use of the "Cape Town" protocol, which involves membrane filtration onto antibiotic-free culture plates (2). Additional analysis of RXH pediatric patient records has indicated that C. concisus was isolated from all the stool specimens of nine liver transplant patients (four males; ages of 8 months to 7 years), six patients with biliary atresia (four males; ages of 2 to 15 months), and three patients with renal transplants or renal failure (one male; ages of 1 to 11 years). While direct involvement of C. concisus cannot be proven in these cases, these results are suggestive of a link between these bacteria and the possible initiation, maintenance, and exacerbation of these diseases. In a study of 457 C. concisus strains from South African pediatric patients, isolated during the period from 1998 to 2005, the resistance to ciprofloxacin increased from 7 to 18%, and the resistance to erythromycin increased from 5 to 22% (5). This increasing antibiotic resistance is a cause for concern.

Aabenhus et al. (1) found, by amplified length fragment

polymorphism analysis of 62 clinical isolates, that *C. concisus* is genetically and taxonomically diverse and contains at least four distinct genomospecies that may exhibit differences in their spectra of virulence potential. These findings may help in the understanding of documented cases of pediatric *C. concisus* infection exhibiting a variety of clinical presentations. I concur with Zhang and colleagues (6) that additional research is essential for a fuller appreciation of the clinical role in pediatric health of *C. concisus*, an underisolated and underappreciated human pathogen.

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Albert J. Lastovica Department of Biotechnology University of the Western Cape Bellville 7535, South Africa

Phone: 2721 4066363 Fax: 2721 4488153 E-mail: lastoaj@mweb.co.za

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