Enterohemorrhagic Escherichia coli associated with hemolytic-uremic syndrome in Chilean children

Cordovez,	
00100102,	

Prado,

Maggi,

Cordero,

Martinez,

Misraji,

Rios,

Soza,

Ojeda,

Levine,

A clinicoepidemiological study was undertaken to determine if enterohemorrhagic Escherichia coli (EHEC) was associated with hemolytic- uremic syndrome (HUS) in children in Santiago, Valdivia, and Temuco, Chile. Prospective surveillance detected 20 hospitalized cases of HUS in children less than 4 years of age in these cities from March 1988 to March 1989. Each HUS patient was matched (by sex and age) with two control children (hospitalized elective-surgery patients). To detect EHEC, DNA from stool culture isolates of E. coli was detected by hybridization with biotin- labelled DNA probes specific for the EHEC virulence plasmid, Shiga-like toxin I (SLT-I) or SLT-II. Stool cultures from 6 of 20 cases (30%) and from 2 of 38 controls (5.3%) yielded EHEC (P = 0.0158). EHEC isolates from all HUS cases hybridized with the EHEC plasmid probe and with probes for SLT-I or -II (or both). The serogroups of the isolates included O157, O26, and O111. EHEC causes HUS in Chile, and the biotinylated gen