Enterohemorrhagic Escherichia coli in hemolytic uremic syndrome in Chilean children. Evaluation of different technics in the diagnosis of the infection Escherichia coli enterohemorrágica en el sindrome hemolítico urémico, en niños chilenos. Evaluación de

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Enterohemorrhagic Escherichia coli (EHEC), have been associated with pathogenesis of hemolytic uremic syndrome (HUS) worldwide. Our aim was to determine the association of EHEC infection and HUS in Chilean children. During may 1991 and october 1993, 34 children with HUS and 33 age matched controls (children with diarrhea that did not develop HUS) were enrolled in a case/control study. For each child a stool and serum sample were obtained at admission. Stools were processed for common enteropathogens and for EHEC identification. EHEC were identified in stools by gene probes for different virulence factors (EHEC plasmid-associated fimbria, Shiga-like toxin I, Shiga-like toxin II and eae adherence factor) and by detection of free fecal toxin by a neutralization assay in Vero cells. Sera were processed for anti-cytotoxin antibodies also by an assay in Vero cells. Enteropathogens were isolated in 20.6% and 15.5% of HUS and control children respectively (p = NS). 91% of the HUS children and