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Timing and utility of ultrasound in Diarrhea associated hemolytic uremic syndrome: 7-Year experience of a large tertiary care hospital

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The authors reviewed the clinical, laboratory, and imaging data from cases of diarrhea-associated hemolytic uremic syndrome (HUS D+), diagnosed at our institution, from 2001 to 2008. The timing and utility of ultrasonographic features of HUS D+ were analyzed. The aim of the study was to determine factors that could aid in the early diagnosis of this disease. A total of 13 children with HUS D+ were identified out of 23 patients with HUS diagnosed during this time period. Evidence of *Escherichia coli* 0157:H7 was found in 9 cases (70%). Ultrasound studies were ordered in 10 patients (71%), all of which showed renal sonographic findings compatible with HUS. Ultrasound was performed at a mean of 13 days after onset of the diarrhea. Of note, 2 patients whose ultrasounds were performed at the beginning of their diarrheal illness manifested ultrasonographic features suggestive of HUS when there was only a mild increase in serum creatinine and no decrease in hemoglobin or platelets, suggesting that ultrasonography can identify renal involvement early in the course of the disease before other systemic signs appear. Early renal ultrasound may be a useful adjunct in the initial evaluation in children with bloody diarrhea. Evidence of increased renal echogenicity in a patient with bloody diarrhea could aid in early recognition of HUS when other diagnoses such as intussusceptions are being entertained, potentially allowing early intervention.