Letter to the Editor

Abdominal Ultrasound Scan in Down Syndrome Patients: High Frequency of Nonsymptomatic Biliary Tract Disease

To the Editor:

From 1989 onward a Down Syndrome (DS) outpatient clinic was started to focus all medical, cytogenetic and counselling aspects for DS patients and their families. Four hundred and sixty DS patients have been attending our hospital during this period ranging in age from birth to adolescence. Since our hospital is a paediatric referral centre in Rio de Janeiro (Brazil), most DS patients are among the paediatric range of individuals seen in our clinic. Furthermore, a specific clinical programme was established with the purpose of monitoring clinical complications, specially those occurring before one year of age.

Among 145 DS patients investigated by abdominal ultrasound (US) scans, 16 (11%) biliary tract abnormalities were detected consisting of 10 asymptomatic biliary stones (radiolucence), 3 biliary sludge, and 3 intrinsic gallbladder abnormalities (transverse septum, fibrosis and irregular shape in one patient each). Most of these patients were white (n = 12), male (n = 9) and 14 of them diagnosed before one year of age. None had perinatal complications or total parenteral nutrition and 4 patients underwent surgery with no further complications. Congenital heart disease was present in 6 patients, consisting of isolated VSD (n = 2) combined either with ASD or PDA, isolated ASD (n = 1) and one PDA combined with congenital megacolon. Other abdominal US abnormalities were observed, mainly unilateral nonvisualized kidneys in 2 patients and renal hydronephrosis in 5 patients (one bilateral). On a prospective basis, another DS clinical programme at a paediatric Brazilian hospital at São Paulo state (Z. Mustacchi) had similar findings in their patients scanned by US.

Therefore, it seems wise to perform at least one ultrasound scan in every DS patient, since a very unusual high frequency of previously unreported abdominal abnormalities can be found and detected at infant age.

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NOTE ADDED IN PROOF
Recently, Aughton et al. [Clinical Pediatrics, 31,650-652, 1992] reported 3 infants with DS and cholelithiasis detected by US scan and suggests that a prospective examination must be performed in infants and children with and without DS to establish whether DS per se may predispose to cholelithiasis.

Received for publication February 2, 1993.
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