Renal Hydatid Cyst Detected in a Child during the Course of Acute Poststreptococcal Glomerulonephritis

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Dear Sir,

Being a developing country, Turkey is endemic for echinococcosis, and other infections and their complications like acute poststreptococcal glomerulonephritis (APSGN) are also frequently seen. We present here a child who was diagnosed, during the course of APSGN, to have a renal hydatid cyst. The coincidental occurrence of these two renal disorders in the same patient at the same time has not been reported before.

A 15-year-old boy was admitted to the hospital because of syncope and edema lasting for 1 day following an upper respiratory tract infection. The physical examination revealed a well-developed lethargic boy with pretibial edema and hypertension (240/120 mm Hg). His fundoscopic examination was

normal. A palpable solid mass of 5-6 cm diameter was found in the right hypochondrium. The laboratory examination showed: hemoglobin 13 g/dl, white blood cell count 11,000/mm³ with 8% eosinophils in peripheral blood smear; proteinuria (++) and microscopic hematuria with red blood cell casts. Blood urea nitrogen was 42 mg/dl (14.9 mmol/l), serum creatinine 1.8 mg/dl (159.12 mmol/l); total protein, albumin, electrolyte levels and liver function tests were normal. The antistreptolysin-O titer was elevated (833 TU), C-reactive protein was 3+, the third component of complement (C3) level was < 20 mg/dl (normal: 50-90 mg/dl), and C4 was 23.8 mg/dl (normal: 10-40 mg/dl).

Due to clinical and laboratory findings, the patient was diagnosed as suffering from APSGN and was treated with antihypertensive and diuretic drugs. Abdominal ultrasonography showed a round cystic mass of 78x55x52 mm in size in the lower pole of the right kidney, which was also demonstrated by computerized tomography. The hemagglutination test for Echinococcus was found to be positive (1/256). One month after admission percutaneous treatment of the hydatid cyst was performed under ultrasonographic guidance [1]. No complication occurred.

Ultrasonographic examination during and after treatment revealed linear echogenic floating structures which represent the separated endocyst (germinative and laminated membranes) in

Fig. 1. Ultrasonography demonstrates the endocyst separated from the pericyst during the procedure.

Fig. 2. One week after the procedure, the cyst size and fluid content were considerably reduced, and degenerated endocyst was floating in the cavity.

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the cyst cavity which is typical for hydatid cysts (fig. 1, 2). Thus on the basis of clinical and laboratory findings, the patient was diagnosed to have a renal hydatid cyst. He was started on mebendazole therapy (for 6 weeks). Proteinuria and hematuria resolved and serum complement levels returned to normal in 8 weeks, and the antihypertensive therapy was discontinued after 2 months. After his discharge, the patient was followed up every month over a period of 6 months and every 2 months thereafter. At the end of 22 months, the cyst had diminished to 28×24 mm without any recurrence, and the hemagglutination test for Echinococcus was negative.

Although percutaneous drainage of hydatid cysts has long been discouraged because of potential complications such as anaphylactic shock and the spread of daughter cysts, recently there have been many reports showing its safe and effective application to liver cysts without any complication [2-4]. However, there is no adequate number of reports about the application of this procedure to renal hydatidosis [5, 6]. In our patient, we performed percutaneous drainage together with oral mebendazole administration. No acute complication was observed. During his follow-up, the cyst diminished significantly in size without any recurrence, and the hemagglutination test for Echinococcus became negative. By this therapy we not only saved the patient from the risk of general anesthesia but also his kidney from partial or total nephrectomy. We also emphasized once more the efficacy and safety of percutaneous needle aspiration of hydatid cysts.

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Announcement

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The Deutsche Arbeitsgemeinschaft für Klinische Nephrologie e.V. would be pleased to receive submission of papers from candidates for the Nils Alwall Prize. This Prize is awarded to young scientists engaged in clinical research in German-speaking regions in the field of nephrology, with particular emphasis on activities involving dialysis or similar methods of extracorporeal elimination or kidney transplants.

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The prize may be awarded to up to 3 nominees.

Candidates up to 45 years of age are required to submit either non-

published work, work published up to 1 year before submission or a summary of original extended research work (but not a habilitation thesis).

If this work involved patients it must explicitly confirm that all relevant ethical principles have been observed (Helsinki Agreement 1964, Tokyo Agreement 1975).

A total of 6 copies of the paper submitted are required. These are to be in anonymous form and accompanied by a short curriculum vitae and information regarding the candidate's present professional activities. These documents must be sent to the Chairman of the Prize Committee not later than April, 15th, 1995, under the following address:

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