Letters

Regression of nephrotic syndrome due to amyloidosis secondary to familial Mediterranean fever following colchicine treatment

Sir,

Familial Mediterranean Fever (FMF) is an autosomal recessive disease virtually restricted to certain ethnic groups originating from the Middle East: Arabs, Sephardic Jews, Armenians and Turks [1,2]. The main complication of the disease is the development of amyloidosis [3]. Amyloid kidney disease progresses from proteinuria to nephrotic syndrome and finally to end-stage renal disease [4]. In most FMF patients, colchicine treatment prevents febrile attacks and development of amyloidosis. In the literature, cases who recovered from nephrotic syndrome secondary to amyloidosis of FMF have rarely been reported [5]. We are presenting a case of a patient with nephrotic syndrome due to amyloidosis secondary to FMF who recovered after colchicine treatment.

Case. A 12-year-old girl was first admitted to the hospital with fever, peripheral oedema and abdominal pain of 3 days duration in September 1995. She had a history of recurrent abdominal pain and fever for 2 years. Physical examination showed periorbital and pretibial pitting oedema. Blood pressure was 110/70 mmHg. The results of the laboratory tests were negative urine culture, urinary protein excretion 147 mg/m²/h, BUN 18 mg/dl, serum creatinine 0.5 mg/dl, ESR 140 mm/h, and serum total protein, albumin, cholesterol and triglyceride levels were 4.8 g/dl, 1.6 g/dl, 320 mg/dl and 380 mg/dl respectively. Rectal and renal biopsies showed amyloidosis. Therapy with 1.5 mg/day colchicine was initiated. In the following year, the patient’s oedema resolved and nephrotic syndrome showed regression. In April 1996,
urinary protein excretion was 60 mg/m²/h and serum protein, albumin, cholesterol and triglyceride levels were 6.2 g/dl, 3.5 g/dl, 160 mg/dl and 180 mg/dl respectively. Four years after amyloidosis was first diagnosed, her serum albumin level and renal function are normal. Her 24-h urinary protein excretion was 150 mg and it has been accepted as remission for 1 year. Follow-up kidney biopsy was not performed due to ethical reasons.

Comment. Since colchicine was first introduced for the management of FMF by Goldfinger [6] in 1972, it has been found to be effective in reducing the frequency of attacks and in preventing amyloidosis in adults and children with FMF [2,7–10]. Once, it was believed that preventive long term treatment with colchicine at an appropriate daily dose could reduce kidney damage to minimal proteinuria in FMF patients, but that it was not effective for amyloidotic kidney disease when it had reached the nephrotic stage [2,7–10]. However, Zemer and Langevitz [5] reported three cases of FMF at the nephrotic stage in which colchicine treatment reduced such kidney damage. Moreover, it has been reported that renal amyloidosis secondary to other systemic diseases, such as psoriatic arthritis and ankylosing spondylitis, were improved by colchicine treatment [11,12]. Colchicine seems to be effective in the prevention and treatment of secondary amyloidosis and may also reverse the nephrotic syndrome secondary to amyloidosis.

The presented case supports the observation by Zemer and Langevitz [5] about reversal of the nephrotic syndrome by colchicine in amyloidosis of FMF. To our knowledge, our case is the first paediatric patient who recovered from nephrotic syndrome secondary to FMF with colchicine treatment.

Department of Pediatrics B Şimşek
Department of Nephrology İ İşlek
Ondokuz Mayıs University T Şimşek
Samsun Ş Küçükködük
Turkey K Cengiz