Acute Glomerulonephritis and Cerebral Edema

J.A.N.	Nieto	Rodriguez
J.B.	Bilbao	Gamy
R.P.	Perez	Maestu
J.		Martinez
L.		De Letona

Internal Medicine II, Puerta de Hierro Clinic, Autónoma University, Madrid, Spain

J.A. Nieto Rodriguez, Internal Medicine II, Puerta de Hierro Clinic , Autónoma University, S. Martin de Porres s/n, E-28035 Madrid (Spain)

Dear Sir,

Encephalopathy is occasionally seen in acute glomerulonephritis, especially in children. The genesis of this disorder, mainly ascribed to arterial hypertension, is obscure [1]. We hypothesize that cerebral edema caused it in a normotensive patient with acute exudative glomerulonephritis and nephrotic syndrome.

A 28-year-old man was seen in the emergency room in extreme agitation, with vomiting and urinary incontinence which had evolved in 8 h. Several days before, he had had a cold and noticed maleolar edema. The blood pressure was 130/70 mm Hg and there was radiologic evidence of right pleural effusion. The CSF was under light pressure and contained 7 cells/ μ l and 24 mg pro-teins/dl. Other examinations revealed nephrotic syndrome (albumin 2.2 g/dl; proteinuria 4.35 mg/min) with microhematuria and normal renal function (creatinine 1.4 mg/dl).

An EEG showed diffuse theta frequencies with bursts of slow waves. The otherwise normal cerebral scanner showed attenuation index of cerebral tissue below normal values (16 UH).

Renal biopsy was diagnostic

of acute exudative glomerulonephritis. Serological tests for streptococcal, HB virus, infectious mononucleosis and toxoplasma infections and VDRL were negative. Diuretics improved symptoms. 2 days later EEG was normal.

With this evidence, we consider that cerebral edema should be included as a possible cause of encephalopathy in acute glomerulonephritis.

References