Acute Oliguric Renal Failure in a Patient with an *Erysipelothrix rhusiopathiae* Bacteremia and Endocarditis

P.		Fernández-Crespo ^a
A.		Serra ^a
J.		Bonet ^a
M.		Gimenez ^b

Departments of Nephrology (Dr. A. Caralps) and Microbiology, Hospital Universitari 'Germans Trias i Pujol', Badalona/Barcelona, Spain

Dra. Pilar Fernández-Crespo, Department of Nephrology, Hospital Universitari 'Germans Trias i Pujol', Ctra. Del Canyet, s/n, E-08916 Badalona/Barcelona (Spain)

Dear Sir,

Erysipelothrix rhusiopathiae (ER) is a pathogen related to infections in animals and rarely implicated in systemic infections in humans. It is described as a rare cause of endocarditis and exceptionally can originate acute glomerulonephritis. We report a case of acute oliguric renal failure due to endoca-pillary proliferative glomerulonephritis secondary to ER endocarditis.

A 51-year-old man, cook, heavy drinker, was admitted because toxic syndrome and intermittent fever. Physical examination revealed cutaneous telangiectases, a grade II/VI plurifocal systolic heart murmur and he-patomegalia. Laboratory tests showed: Hct 22% (0.22 l/l); Hb 7.7 g/dl (77 g/l); ESR 140 mm 1st hour; white blood cell count, 10·10³/mm³ (10·10⁹/l) with 77% neutro-phils, 10% lymphocytes, 9% monocytes, 4% eosinophils; platelets, 100·10³/mm³ (100·10⁹/l); prothrombin time 56%; blood urea nitrogen 474 mg/dl (79 mmol/l); serum creatinine 6.4 mg/dl (588 µmol/l) and potassium 5.7 mEq/l; C3 25 g/dl (n = 52-120) (250 g/l), C4 10 mg/dl (n = 18-49) (0.1 g/l), CH₅₀ < 100 U/ml (n = 80-140); circulating immunocomplexes 36 µg/ml (n < 1.5); C-reactive protein 30 mg/l (n < 6) and rheumatoid factor 106 IU/ml (n < 40). Antinuclear DNA antibodies, ANCAs and cryoglobulins were negative. Urinalysis revealed a protein-uria of 2.8 g/day and > 100 erythrocytes/field. Abdominal echography showed hyper-echogenic kidneys with normal size. A renal biopsy showed a dense polymorphonuclear infiltration in glomeruli and tubules with granular parietal positivity for C3 in the immunofluorescence. Diuresis decreased and hemodialysis was started. Blood cultures were positive to ER. Echocardiography revealed two vegetations on the aortic valve. We started treatment with intravenous sodium G penicillin. In the third week acute lung edema secondary to severe aortic insufficiency presented requiring valvular replacement. He died 4 days after heart surgery.

ER infection is related with professional exposure to the microorganism (e.g., fishermen, fishmongers, butchers, cooks) [1]. Bacteremia is an uncommon clinical form of ER infection and is described more frequently in alcoholic men, endocarditis being the manifestation more frequently associated [2]. Renal involvement has rarely been quoted during ER bacteremia

and has always been associated with endocarditis. Microhematuria is present on up to 24% of patients with ER endocarditis [2]. Proteinuria is rarely seen [3, 4]. Renal histology is described only in the last 2 cases, which show a segmentary and focal glomerulonephritis in 1 case [3] and mesangial proliferative glomerulonephritis in the other case [4]. Our patient presented acute renal failure, microhematuria and proteinuria with endocapillary proliferative glomerulonephritis. Up to date, this severe renal involvement accompanying such a lesion has never been described as being associated with ER endocarditis.

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