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Diabetic foot and renal failure. Theoretical and practical considerations

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To the Editor,

Diabetic patients with diabetic foot have high mortality rates and it has been suggested that aggressive cardiovascular treatment decreases morbidity and mortality in these patients.^{1,2} As such, we decided to perform a retrospective review of the level of compliance with consensus documents on secondary prevention in patients with diabetic foot at their first hospital examination. We assessed a total of 129 patients, collecting clinical information, haemogram and biochemical test results, and treatments administered. We performed all statistical analyses using SPSS statistical software version 15.0. Of the 129 patients studied, 80 were male and 49 were female, with a mean age of 63.02±13.49 years. The clinical parameters measured revealed arterial hypertension in 71.3% of patients, 23.3% were active smokers, mean HbA, was 8.74±2.23%, mean LDL cholesterol was 90.06±35.58mg/dl, and mean triglycerides were 151.84±82.49mg/dl. As regards treatment, 64.3% received insulin and 43.4% oral anti-diabetic drugs. In addition, 52.7% of patients received statins, 1.6% fibrates, 13.2% allopurinol, 21.7% calcium antagonists, 38.8% diuretics, 14.7% beta blockers, 24.8% angiotensinconverting enzyme (ACE) inhibitors, 30.2% angiotensin receptor blockers (ARB), and 55.8% anti-platelet drugs. Thirty-one patients (24%) had a MDRD-4<60ml/min. As compared to patients with an MDRD-4>60ml/min, this group was older (70.52±10.87 years vs 60.04 ± 12.64 years; P=.000), had lower levels of Hb (10.62±1.79g/dl vs 12.33±1.96g/dl; P=.000) and haematocrit (31.71±5.77% vs 36.04±5.46%; P=.001), and had higher levels of K+ $(4.77\pm0.56$ mmol/l vs 4.52 ± 0.39 mmol/l; P=.027), uric acid (6.86±2.16mg/dl vs 4.67 ± 1.18 mg/dl; P=.000), and red blood cell distribution width (RDW) (16.93±3.75% VS 14.16±2.53%; P=.000), with no differences based on the treatments administered. Based on these results, we can conclude that patients with diabetic foot that seek their first hospital evaluation have hypertension, poorly controlled high glucose levels, and are receiving treatments that are quite different from those recommended for secondary prevention. We must point out that approximately 20% of patients in our study also had chronic renal failure, and there were no significant differences in terms of treatment administered between this sub-group and all other patients. Furthermore, these patients with diabetic foot and chronic renal failure had a higher percentage of RDW, which has been associated with increased mortality.³

In order to achieve treatment targets and a change in mentality, it is important to know the present situation and prioritise the goals accordingly. The fact that 44.2% of these patients go without anti-platelet treatment, 35% without ACE inhibitors or ARBs, and 47.3% without statin treatment should lead us to reflect upon the current reality and how to bring our clinical action more in line with theoretical recommendations on a long-term basis.

Conflicts of interest

The authors affirm that they have no conflicts of interest related to the content of this article.

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