

High mortality after pelvis and lower limb fractures in ESRD

Sir,

The high mortality rate associated with hip fracture in the general population, as well as in the end-stage renal disease (ESRD) population, is well described. However, the mortality associated with pelvis and lower limb fractures in ESRD patients remains unknown.

We reviewed the medical records of all chronic haemodialysis or peritoneal dialysis patients hospitalized at Maisonneuve-Rosemont Hospital for a fracture from 1 July 1995 to 1 February 2007. Femoral neck, pelvis, femoral condyle, tibial plateau, patella, tibia and malleolus fractures were considered. Femoral neck and pelvis fractures were analysed separately, while the other fractures were analysed together as lower limb fractures. All patients who died during the study period were identified and mortality rates were calculated.

During the 127-month-long study period, 60 dialysis patients were hospitalized for a total of 68 fractures. Seven patients had two fracture episodes, and one patient had three fracture episodes. The three most common fracture sites were hip (40 cases), pelvis (13 cases) and malleolus (8 cases) (Table 1). The 1-year mortality rate after a hip fracture was 42.5% (17 patients), with an in-hospital mortality rate of 20%. Two patients died during their hospitalization for a pelvis or lower limb fracture. One-year mortality rates were 30.8% after a pelvis fracture and 20% after a lower limb fracture. Median survival during the observation period was 427 days after a pelvis fracture and 581 days after a lower limb fracture.

Hip fracture is associated with a 1-year mortality rate of 24% in the general population [1]. In ESRD, the 1-year mortality rate after a hip fracture approximates 50% [2]. Our results are consistent with previously reported mortality rates.

Few studies have described the mortality associated with pelvis or lower limb fractures in the general population. In a British study, the 1-year mortality rates were 8.7% after pelvis fracture and 2.4% after a lower limb fracture [3]. In our ESRD cohort, the 1-year mortality rates for pelvis and lower limb fractures were increased 3.5- and 8.3-fold, respectively. In fact, the impact of pelvis and lower limb fractures on mortality in ESRD patients appears very similar to the impact of hip fracture in the general population. Like hip fractures [4,5], pelvis and lower limb fractures are probably markers of poor nutritional and general health status in this population.

With a 1-year mortality rate similar to that of hip fracture in the general population, our data delineate for the first time the poor outcomes associated with pelvis and lower limb fractures in ESRD patients. The incidence, risk factors, clinical and functional outcomes of such fractures in ESRD patients need to be evaluated in larger, registry-based studies.

Conflict of interest statement. None declared.

Table 1. One-year mortality by fracture type

Fracture sites	Number of fractures	One-year mortality (%)
Hip	40	17 (42.5%)
Pelvis	13	4 (30.8%)
Malleolus	8	0 (0%)
Femoral condyle	2	1 (50.0%)
Tibial plateau	2	0 (0%)
Tibia	2	2 (100.0%)
Patella	1	0 (0%)

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Mycophenolate mofetil as a possible therapeutic option for idiopathic membranoproliferative glomerulonephritis

Sir,

A 20-year-old Caucasian woman with no significant past medical history was referred to the nephrology clinic for new-onset edema of the lower extremities and four positive proteinuria on dipstick. Her serum creatinine was 2.7 mg/dl with an estimated glomerular filtration rate (eGFR) of 24 ml/min/1.73 m². The 24-h urine protein was measured at 18.8 g. A thorough biologic and immunologic work-up was negative. The renal biopsy revealed type III membranoproliferative glomerulonephritis (MPGN). The patient was started on high dose intravenous methylprednisolone (500 mg/day for 3 days) followed by oral methylprednisolone (16 mg/day) and mycophenolate mofetil (MMF) (500 mg twice a day). Six weeks later, serum creatinine improved to 1.7 mg/dl and proteinuria decreased to 5.5 g/24 h. The MMF dose was subsequently increased to 500 mg three times a day. At 6 months, her