Dear Sir,

Rhabdomyolysis has several causes, both traumatic and nontraumatic [for references, see 1]. Up to 33% of patients with rhabdomyolysis develop acute renal failure (ARF). The recovery time may vary from 4 to 8 weeks depending on the degree of ARF. We report now on 3 patients who developed ARF, due to rhabdomyolysis, after the intravenous or intranasal use of a mixture of cocaine and heroin, treated with conventional therapy or with conventional therapy and subpharmacological doses of dopamine plus frusemide.

Patient 1

A 23-year-old male drug abuser was brought to the emergency room comatose and with hypovolemic shock after his last intravenous injection of a mixture of cocaine and heroin. The patient had been found lying on a beach where he had been for about 30 h. Examination revealed a marked edema of the right arm and leg. Initial laboratory values are shown on table 1. Oligoanuria was present. Therapy was started with fluid administration, sodium bicarbonate and loop diuretics as usual. On the 2nd hospital day hemodialysis was started. The oliguric phase persisted for 22 days and serum urea and creatinine peaked at 142.6 mmol/l (400 mg/dl) and 925.9 µmol/l (10.6 mg/dl), respectively. The patient required 18 hemodialytic treatments. On the 46th hospital day the patient was discharged with normal renal function.

Patient 2

A 25-year-old male drug abuser was brought to our department with a 1-day history of anuria. He had been found lying on his right side for about 20 h after he had taken intranasally a mixture of cocaine and heroin. Examination revealed a marked edema of the right arm and leg associated to cutaneous hypoesthesia and paralysis of the right arm. Temperature was 37.5 °C and the patient was totally confused. Blood pressure was 120/80 mm Hg. Initial laboratory values are shown on table 1. Therapy was started with fluid and sodium bicarbonate administration plus a continuous intravenous infusion of subpharmacological doses of dopamine (3 µg/kg/min) and an intravenous bolus of frusemide (60 mg) 3 times a day. On the 2nd hospital day it was necessary to start hemodialysis. Oliguria persisted for 11 days during which urea and serum creatinine peaked at 107.7 mmol/l (302 mg/dl) and 1,065.7 µmol/l (12.2 mg/dl),
respectively. 10 hemodialytic treatments were performed and the patient was discharged on the 21st hospital day with normal renal function.

Patient 3
A 22-year-old male was brought to the emergency room with a 1-day history of left leg pain and hypoesthesia, abdominal pain.
damage, a combination of dopamine in low doses with frusemide seems to be a rational way to reverse oliguria in cocaine-associated myoglobinuric ARF.

References