

## **Acute renal injury in nephrology consultation: Prevalence, epidemiology and clinical profile**

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### **Abstract**

**Introduction:** Renal failure (RF) is a global health problem. It is multifactorial and can be detected during the follow-up of different pathologies. The aim of this work is to study the different epidemiological and clinical profiles and the evolution of patients with the recent discovery of RF.

**Method:** We conducted a retrospective descriptive study at the nephrology consultation over a period of two years (January 2020-January 2022). Patients followed for chronic renal disease were excluded.

**Results:** The number of patients with newly discovered RF was 93. The mean age was 63.3 years [23-96] with a sex ratio M/F of 1.3. Hypertension was present in 64 patients (68.81%) and diabetes in 47 patients (50.53%). Twelve patients had heart failure. Familial nephropathy was found in 12 patients. The mean creatinine level was 185.77 $\mu$ mol/l +/- 134.83.

Three patients had hematuria. The proteinuria was glomerular in 14 patients (15.05%).

Treatment interfering with renal hemodynamic was noted in 49 patients (52.68%), recent iodinated contrast injection in 7 patients (7.52%). Fifteen patients were dehydrated (16.12%). Renal ultrasound was performed only in 60 patients. No obstructive cause was found for this RF. Polycystic kidney disease was found in one patient.

Emergency hemodialysis was indicated for threatening hyperkalemia (2 patients), uremia (1 patient) and uremic pericarditis (1 patient). A renal biopsy was performed in two patients and showed acute interstitial nephritis in one patient and amyloidosis in another. The evolution was marked by a stabilization of the renal function in 28 patients, an improvement in 31 patients and a worsening in 20 patients, among whom five developed end-stage renal failure and chronic hemodialysis.

**Conclusion:** Screening for RF is imperative in all patients with risk factors. A rigorous follow-up by a nephrologist is necessary in order to establish the etiological diagnosis, to evaluate the severity and to initiate a possible treatment.