

Heart Congress 2017- Implications of Renal Complications In Out Patient Referral for Coronary Angiography: Prospective Observational Study of 98 Cases - Mingou Js- University Hospital Aristide Le Dantec, Senegal

Mingou Js

University Hospital Aristide Le Dantec, Senegal

Abstract

The incidence of acute kidney failure remains high, due to the multiplication of interventional procedures on subjects at risk. It increases both morbi-mortality in hospitals and in the long term. The identification of patients at risk is primordial in order to implement the preventive measures, whose expansion remains the 'gold standard'. The realization of a coronary angiography in ambulatory care in this type of patient at risk is possible without increasing renal morbidity, under the cover of a good hydration.

Introduction:

Acute renal failure is a complication that remains common after injection of contrast agent. It increases both morbidity and hospital mortality in the long term. We wanted to carry out a prospective observational study to evaluate the incidence of renal complications (acute renal failure, dialysis) of patients referred as an outpatient in our center for coronary angiography and who have benefited from measures of prevention of renal toxicity as recommended by learned societies.

Methodology:

We conducted a prospective study at the Yves Le Foll hospital in Saint Briec over a period of 4 months from November 2015 to February 2016, in patients admitted on an outpatient basis for coronary angiography who had previously suspended all drugs with nephrotoxic potential and with hydration surrounding the examination. A survey card was developed to collect, after informed consent, sociodemographic data, risk

factors, comorbidities, clinical and paraclinical data. All data was entered and analyzed using SPSS software version 18.0.

Results:

Ninety-eight patients had an ambulatory coronary angiogram during this period. The sex ratio was 3.66 in favor of the male gender with an average age of 65 years. Three-quarters of the population (71%) had at least one risk factor for contrast-induced nephropathy. The mean clearance values before and after coronary angiography were almost similar (80 $\mu\text{mol/l}$) without significant variation. No impairment of renal function was observed in patients at risk regardless of the amount of contrast injected (range: between 30 and 277 ml). When patients accumulate risk factors for induced nephropathy in the contrast medium, there is an increase in the blood creatinine level with the number of factors but no significant change ($p: 0.24$) of renal function after iodine injection.

Conclusion:

The incidence of acute kidney injury remains high, due to the increase of intervention procedures in subjects at risk. The identification of these patients at risk is paramount in order to implement the preventive measures of which volume expansion remains the gold standard. The realization of an outpatient coronary angiography in this type of patient at risk is feasible without increasing renal morbidity with a good hydration.