

# **ACUTE RENAL FAILURE SECONDARY TO RENINE ANGIOTENSIN SYSTEM BLOKERS: SHORT AND LONG-TERM PROGNOSIS**

Najla Dammak, Khawla Kammoun, Salma Toumi, Yosr Chaabouni, Mahmoud Kharrat, Faical Jarraya, Mohamed Ben Hmida, Jamil Hachicha

Hedi chaker hospital, Nephrology, Sfax, TUNISIA.

## **Introduction and objectives:**

Blockers of the renin angiotensin system (BSRA) are commonly used in hypertension, cardiovascular and renal diseases. However their use is associated with risk including renal affects. The aim of this study is to determine the progression and prognosis of acute renal failure (ARI) secondary to BSRA.

## **Methods:**

Our study is retrospective during 9 years (January 2004-December 2012) interesting patients admitted for ARI secondary to the BSRA. The endpoints were: short-term improvement of renal function (1 month) and long-term hemodialysis (5 years).

## **Results:**

We collected 116 cases of ARI secondary to BSRA therapy. the average age was  $69 \pm 12$  years with a sex ratio of 0.7. A history of hypertension, diabetes, heart failure and CKD was observed in 85.3%, 38.8%, 21.6% and 35.3%, respectively.

An associated drug was noted 28.4%: anti inflammatory drugs (17.2%), aminosides (3.4%) and Iodized contrast agents (7%). In the short term, the absence of improvement in renal function was observed in 19% of cases.

Patients who did not improve their renal function were older ( $70 \pm 10$  years versus  $64 \pm 16$  years) than those with improvement ( $p = 0.028$ )

After discharge, 31% of these patients are lost to follow-up, 4.3% have aggravated their renal function and / or reached the end stage of CKD. Diabetes ( $p = 0.012$ ), hypertension ( $p = 0.015$ ), history of nephropathy ( $p = 0.001$ ) and winter season ( $p = 0.002$ ) are factors for poor long-term prognosis.

## **Conclusion:**

The ARI due to BSRA is associated with a high morbidity and mortality. Our study showed that advanced age is a factor of poor short term progression. Long-term prognostic factors were hypertension, diabetes a history of nephropathy and the winter season. The ARI to BSRA represents an often avoidable adverse event, the prognosis of which is usually better than that of ARI related to other etiologies..

