

Biopsy-proven acute interstitial nephritis, 2005-2017: a case series.

Dr. Rafeea Shah¹, Dr. Bamidele Ajayi¹, Dr. Azm Ul Hussain¹

¹Heartlands Hospital-University Hospitals Birmingham, Birmingham, United Kingdom

INTRODUCTION:

Acute interstitial nephritis remains a common cause of AKI which occasionally can be severe enough to need renal replacement therapy. The causes and outcomes of AIN have been changing over the years especially with the introduction of newer medications including newer antibiotic families. We, therefore, undertook a retrospective review of biopsy-proven acute interstitial nephritis between the years 2005 to 2017 to ascertain the changing profile; if any of this important diagnosis.

METHODS:

Single-center case series of all the biopsy-proven acute interstitial nephritis patients presenting between 2005 to 2017. Patients' data was examined to look for the etiology of AIN, treatment provided and degree of renal recovery.

RESULTS:

A total of 82 patients were found to have Acute interstitial nephritis on renal biopsy. The mean age at the diagnosis was 64.7 +/- 13.9. Female to male ratio was 1:1.5.

Out of 82 patients, the cause remained unknown in 35 (42.7%) patients.

Overall 41(50%) cases were linked to a drug. Omeprazole was identified as causative agent in 18 (22%) cases followed by NSAIDs (n 6; 7.3%), Amoxicillin (n 5; 6.1%) and Flucloxacillin (n 3; 3.7%).

Paraproteinemia was associated with 3 cases, 2 were linked to systemic infection. 1 case was attributed to an autoimmune disorder (Sjogren syndrome) and 1 to Sarcoidosis.

36(44%) patients had complete renal recovery while 41(50%) regained partial function. 16 patients required dialysis however, only 5(6%) patients failed to recover and remained on dialysis at the end of treatment.

76(92%) patients were treated with corticosteroids for an average of 12 weeks.

CONCLUSIONS:

Omeprazole and NSAIDs remain the commonest identifiable causes of drug-induced AIN in keeping with prior case series reviews. However, we acknowledge that it was impossible to identify the cause of AIN in a significant proportion of patients in this study. Despite the use of corticosteroid therapy, less than half of the patients achieved a complete renal recovery.