

RETROSPECTIVE STUDY OF CLINICAL PROFILE OF PATIENTS WITH BIOPSY PROVEN ACUTE INTERSTITIAL NEPHRITIS – 3 YEAR REVIEW.

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Introduction

❖ The incidence of biopsy-proven acute interstitial nephritis has increased dramatically over the past decade.

❖ It is the 3rd most common cause of AKI in hospitalized patients.

❖ The classic presentation of AIN includes fever, rash, arthralgias, eosinophilia, and acute kidney injury.

❖ Clinical data on AIN are very few in south India .

❖ Hence this study was done to analyse the clinical profile of the patients with biopsy proven acute interstitial nephritis.

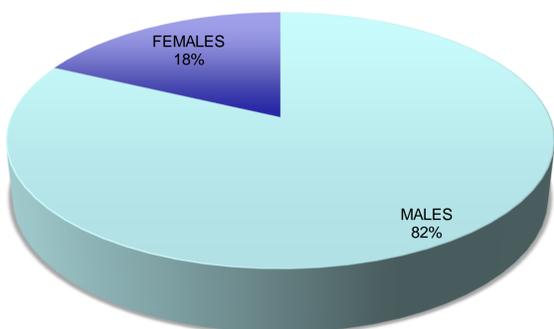
Methods

❖ 78 patients with AIN were identified by retrospective review of all native renal biopsies from January 2018 to July 2021.

❖ We excluded patients with proliferative glomerulonephritis, biopsy consistent with cortical necrosis, pyelonephritis and those with allograft biopsies.

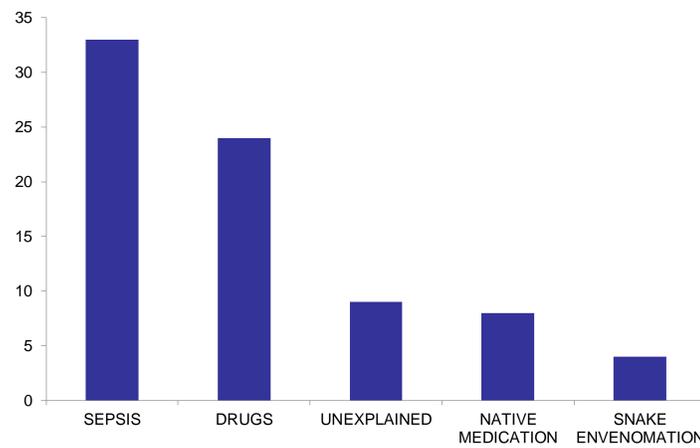
RESULTS

❖ Majority of the patients were in 5th decade with male preponderance.

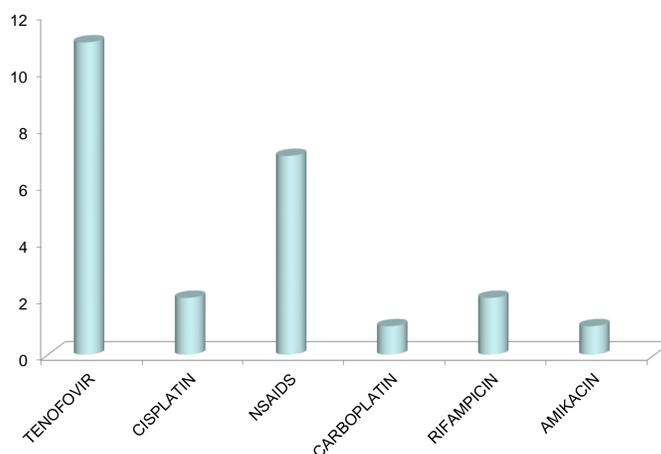


❖ Fever was present in 20 (25.6%), eosinophilia in 10 (12.8%) cases and rash only in 4 (5.1%) cases.

❖ Pyuria was present in 30 (38.4%) cases, hematuria in 10(12.8%) cases, eosinophiluria in 8(10.2%) cases,, white cell casts in 4(5%) patients. 8 (10.2%) patients had nephrotic range proteinuria.

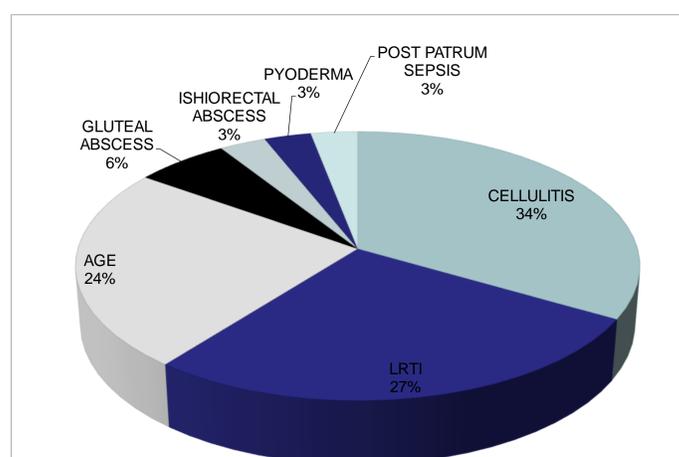


CAUSES OF AIN



DRUGS CAUSING AIN

Infection was the most common cause 33 cases (42.3%) with cellulitis being the most common infection 11(33%) followed by drugs 24(30.7%) cases.



CAUSE OF INFECTIONS

❖ Majority of the patients were in AKI stage III 34(64.1%).

❖ 11(14.1%) patients required RRT.

❖ Majority 48(61.5%) were admitted to wards.

❖ Additional findings on renal biopsy –

- ATN-11 (14.1%)
- FSGS- 9 (11.5%)
- Chronic interstitial nephritis- 4 (5.1%)
- Pigment nephropathy- 4(5.1%) (3 patients had high LDH and 1 patient had high CPK)
- Diabetic nephropathy-4(5.1%)
- Minimal change disease- 2 (2.5%)
- 1(1.2%) patient had granulomatous lesion which was diagnosed as tuberculosis.

Discussion

- Muriithi et al. 133 patients with biopsy-proven AIN from 1993 through 2011 included autoimmune diseases, drug induced AIN was the most common cause followed by autoimmune disorders.
- Effa et al in reported 54 patients with AIN in South Africa with drugs (Rifampicin) as most common cause followed by infections.

Conclusion

➢ The prevalence of AIN has increased in recent years, especially in elderly patients.

➢ In our study most common cause of AIN was infection followed by drugs(Tenofovir)

➢ Majority of the patients were in AKI stage III, 32% of which required RRT

➢ Classical triad of AIN is rarely seen in clinical practice.

➢ AIN in other conditions such as pigment nephropathy and snake envenomation needs to be considered.

References

1. Muriithi et al, Biopsy-Proven Acute Interstitial Nephritis, 1993-2011 A Case Series Am J Kidney Dis. 64(4):558-566. :
2. Emmanuel E. Effa et al, Clinical profile and outcome of patients with biopsy-proven acute interstitial nephritis in Cape Town: a 10-year review
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