



STUDY OF AKI AMONG ENTERITIS PATIENTS IN TROPICS AND OUTCOMES:

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ABSTRACT *Background:* Acute kidney failure is outlined as fast decline in capillary filtration rate and retention of chemical elements. It has numerous etiological factors among that acute enteritis is a crucial cause that ought to be evaluated and treated. *Methods:* This study was conducted throughout the duration of November 2019-may 2021. Patients presenting with acute enteritis landing in ARF of each genders were hand-picked for the study. Proper history, clinical profile was collected and time lapse between presentation of acute GE and patients landing into ARF was recorded consequently. Patients were investigated with CBP, RFT, CUE, stool examination at the time of admission. *Interpretation and Results:* The MC type of renal failure in our study was ATN and then prerenal failure. Of sixty patients, 83.5% survived and 16.5% expired. 42 patients had AKI with in 5 days of gastro enteritis with 63% in Pre renal and 47.5% in ATN cluster. *Conclusion:* Out of 60 patients, 46.6% patients had prerenal uremia and 53.3% had ATN and oliguria was seen in 71.6% patients, anuria in 16.6% patients, while 11.6% patients were in non oliguric AKI. Out of sixty patients twenty one requirement dialysis.

KEYWORDS: acute tubular necrosis, oliguria, gastro enteritis, acute kidney injury, hyperkalemia, acidosis, renal replacement therapy

INTRODUCTION:

Acute kidney Injury is outlined as fast decline in capillary filtration rate and retention of chemical element waste products. It's a renal organ pathology with numerous etiological factors among which acute enteritis is a crucial cause that ought to be evaluated and treated. Patients presents with symptoms of nausea, diarrhea, vomitings, pain abdomen. ARF complicates about 5% of hospital admissions. ARF may be prerenal, renal, postrenal most of which are reversible. Prerenal uremia is the most cause behind ARF that is reversible when treated appropriately.

Gastroenteritis is a common infection in individuals among tropical countries due to poor socioeconomic status, poor sanitation. Occurrence of aki in patients with acute enteritis is as a result of reduced intravascular volume that decreases capillary filtration rate. Prolonged ischemia lands into ATN wherever transition from prerenal to intrinsic AKI will be ascertained. As enteritis could be a common cause of AKI in tropical areas, and the clinical outcomes during this situation varies.

AIMS AND OBJECTIVES

1. To study occurrence of ARF following acute enteritis
2. To analyze clinical options and laboratory parameters with the result of ARF
3. To spot poor prognostic factors

MATERIALS & METHODS

Study conducted throughout the nov month 2019 to may 2021.

INCLUSION CRITERIA

1. Pts with clinical features of enteritis
2. Pts of both genders with aki due to enteritis

EXCLUSION CRITERIA:

Pts of aki other than due to enteritis

Pts are looked for signs of dehydration & further classified into No signs/mild/Moderate dehydration with loss of skin turgor severe with cardiovascular disease Overload with pulmonary edema.

Blood count, renal function tests, ESR, Urine & Stool Examination together with Hanging drop, HIV, total WBC & differential, ESR, liver fnts were taken.

Treatment:

Pts got adequate fluid replacement supported by severity of dehydration as a primary treatment. complications are managed accordingly. daily I/O charting was maintained and appropriate antibiotics were initiated based on culture sensitivity reporting.

HD was started for pts having hyperkalemia, pulmonary edema & severe acidosis, and with s.creat > 8mg/dl.

RESULTS

Of sixty patients fifty patients survived. ten patients expired. thirty-nine pts benefited with medical treatment, where as twenty one patients needed dialysis. Three pts succumbed to death despite of dialysis & seven pts died due to complications due to sepsis and MODS who belonged to ATN group

Table 1: management of patients

	Prerenal	ATN
No of Pts	28	32
Medical mx	28	11
Hemodialysis	-	21

CONCLUSION & SUMMARY

Enteritis is among 24 % of hosp admissions landing into aki in this study. Among 60pts who were studied 46.6% pts had prerenal azotaemia, 53.3% pts had ATN. Oliguria occurred in 71.6% pts, anuria in 16.6% whereas 11.6% pts were in non oliguric state during admission. More incidence among males observed than females due to probable high environmental exposure. Common electrolyte abnormalities being hyperkalemia, hyponatremia which is found in 63% of patients. Most common complication being sepsis out of which 7 people died despite aggressive therapy. Management is intravenous fluid therapy, correcting electrolyte imbalance & administration of acceptable antibiotics. dialysis was done in 21 patients who are refractory to medical therapy. ARF following GE differs from other etiologies of ARF by frequent incidence of symptom & encompasses a higher prognosis when intervened in a timely manner and careful monitoring of complications relating to electrolyte abnormalities.

Table 2: Patients distribution:

Month	2019	2020	2021	Total
Jan		1	1	2
Feb		3	2	5
March		2	4	6
April		4	3	7
May		2	3	5
June		3		3
July		4		4

August		7		7
September		5		5
Oct		3		3
Nov	2	2		4
Dec	7	2		9

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