



A STUDY OF CLINICAL AND ETIOLOGICAL SPECTRUM OF HYPOKALEMIC PARALYSIS

General Medicine

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ABSTRACT

BACKGROUND: Acute hypokalemic paralysis, a clinical syndrome characterised by acute systemic weakness and low serum potassium, is a rare but treatable cause of acute weakness. Morbidity and mortality associated with unrecognised disease include respiratory failure and death. Hence, it is imperative for physicians to be knowledgeable about the causes of hypokalemic paralysis, and consider them diagnostically.

KEYWORDS

OBJECTIVES

To study the clinical, etiological profile and outcome of hypokalemic paralysis in patients admitted in Gandhi hospital.

MATERIALS AND METHODS

It is a study of 50 clinically confirmed cases of hypokalemic paralysis patients admitted in Gandhi hospital.

INCLUSION CRITERIA

All patients >16yrs of age presenting with acute flaccid weakness involving two or more limbs due to hypokalemia with potassium levels less than 3.5mmol/ltr.

EXCLUSION CRITERIA

1. Age <16yrs
2. CNS causes of quadripareis { Gullian barre syndrome, Acute Transverse Myelitis, cerebro vascular accident}

RESULTS

The present study was conducted in 50 patients admitted with a diagnosis of acute hypokalemic paralysis. Following are the results :
Age: The mean age of cases was observed to be 34 years

Gender: The study group was observed to comprise of males 32(64%) and females 18(36%).

Past history : Past history of similar episodes was present in 7(14%) patients and was absent in remaining 43(86%) patients

Family history : none of the patient had positive family history 28 patients had precipitating factors like strenuous exercise, acute gastroenteritis.

There are no primary causes in this study Secondary causes are
Acute Gastroenteritis - 17
Bartter Syndrome - 9
Profuse sweating - 6
Renal tubular acidosis - 4
Gitelmann syndrome - 4
Diuretics - 4
Thyrotoxic periodic paralysis - 2
Diabetic keto acidosis - 2
Cushings syndrome - 2

SUMMARY:

The present study was conducted to study the aetiology, clinical features and outcome of acute hypokalemic paralysis in patients admitted in a tertiary care hospital. It was conducted on 50 patients of acute hypokalemic paralysis. The mean age of patients was 34.18(+11.23) years and ranged from a minimum of 18 years to a maximum of 65 years. The study group comprised of 32(64%) males and 18(36%) females with a male to female ratio of 1.78:1. In all 50(100%) patient's acute hypokalemic paralysis was secondary and none of the patients had primary acute hypokalemic paralysis. Acute gastroenteritis was present in 17(34%) patients, Bartter syndrome was present in 9(18%)

patients; profuse sweating was present in 6(12%) patients, renal tubular acidosis was diagnosed in 4(8%) patients and 4(8%) patients also had diuretic use. 4(8%) patients had Gittelmann syndrome; thyrotoxic periodic paralysis (TPP) was diagnosed in 2(4%) patients and Cushing's syndrome was present in 2(4%) patients and 2(4%) patients were diagnosed with Diabetic Keto Acidosis (DKA). Patients were managed with oral/IV potassium supplementation depending on the grade of hypokalemia. The mean recovery time (from initiation of potassium supplementation to complete recovery) was 34.8(+10.33) hours and mean duration of hospital stay was 3.76(+1.20) days. None of the patients died during hospital stay.

CONCLUSIONS:

All patients of acute hypokalemic paralysis were of secondary origin. There are no primary causes in this study. Acute Gastroenteritis was an important predisposing factor of hypokalemic paralysis.

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