



SERUM HYPOMAGNESEMIA IN CRITICALLY ILL PATIENTS IN MEDICAL ICU WITH AND WITHOUT DIABETES MELLITUS

Dr. Jayesh N Thaddani

Junior Resident Department of General Medicine, Sree Balaji Medical College and Hospital, India

Dr. N. N. Anand*

Professor Department of General Medicine, Sree Balaji Medical College and Hospital, India *Corresponding Author

ABSTRACT

INTRODUCTION :- Study the relation between low magnesium level in critically ill patients and how their levels determine the prognosis of patients with and without diabetes mellitus with various forms of critical illness was studied.

AIMS AND OBJECTIVES :- To study serum magnesium levels in critically ill patients admitted in medical intensive care unit. To correlate serum hypomagnesemia in critically ill, diabetic and non-diabetic patients admitted in a medical intensive Care unit and their mortality.

MATERIAL AND METHODS :- Totally 60 critically ill patients were enrolled for this purpose. The study was conducted in the intensive care unit of Sree Balaji Medical College and Hospital. These patients were divided into survivors and non-survivors as per the outcome depending on the levels of magnesium post admission and were correlated according to age, sex and diabetic and non-diabetic status.

RESULTS :- Out of the 19 patients with hypomagnesemia, 17 had diabetes mellitus and 2 were non diabetics. In patients with hypomagnesemia and diabetes mellitus, 88.2%(n=15) were non survivors and 11.7% (n=2) were survivors. In patients with hypomagnesemia without diabetes mellitus, 100% (n=2) were survivors. The difference is statistically significant ($p < 0.005$). Thus patients with diabetes and hypomagnesemia had more mortality than patients with hypomagnesemia and without diabetes mellitus.

CONCLUSION :- Mortality was higher in patients with hypomagnesemia and diabetes than without diabetes mellitus.

KEYWORDS : Magnesium, Diabetes.

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