Abstract

BACKGROUND:
Hypophosphatemia is one of the common disorders that develop in critically ill patients. It has potential complications and is often unnoticed in them.

OBJECTIVE:
Determining the incidence of hypophosphatemia in critically ill patients, its association with clinical outcomes and the possible risk factors.

METHODS:
50 patients were enrolled in this single centred prospective study, over a period of 6 months. Levels of serum phosphate were measured randomly during their ICU stay. The following variables were analysed: age, gender, diagnosis on admission, use of dopamine, furosemide, steroids, dextrose intake, insulin, serum levels of phosphorous, calcium, liver function tests, renal function tests, number of days of mechanical ventilation and mortality.

RESULTS:
The incidence of hypophosphatemia was 8%. All of them were on mechanical ventilators. Association between hypophosphatemia and COPD (P value = 0.02), liver disease was statistically significant. (P value = 0.005). Correlation between the incidence of hypophosphatemia and mechanically ventilated patients was statistically significant (P value = 0.03). Statistically significant mortality rate was associated with hypophosphatemia.

CONCLUSION:
In a critically ill-patients, Hypophosphatemia is a predictor of respiratory failure and mortality. So some place should be reserved for serum phosphate levels in ICU blood investigation panels.

KEYWORDS:
Critical illness; Hypophosphatemia; Mechanical ventilation : Mortality ; Phosphorus