

ABSTRACT

Introduction: Serum calcium is an important cation which is maintained in a narrow range of concentrations in the body. Changes in calcium levels beyond this range can result in life threatening consequence. Hypocalcemia is one of the metabolic problems frequently encountered in clinical practice.

Objectives: To assess the prevalence of hypocalcemia among hospitalized patients in general medical wards at Sri Jayewardenepura General Hospital, Kotte.

Methodology: This is a hospital-based prospective descriptive study conducted among patients admitted to general medical wards at Sri Jayewardenepura General Hospital. Ethical clearance was obtained from the ethics review committee at Sri Jayewardenepura General Hospital and Postgraduate Training Centre.

Results: Total number of participants were 151. The prevalence of hypocalcemia in the study population was 58.9% (95% CI- 0.506 to 0.668)); of those, the majority (96.6%) had mild hypocalcemia. Majority of hypocalcemic population was males (56.2%) and was less than 45 years of age (43.8%). Of females 53.8% were menapoused. 35.9% had coexistent magnesium and/or phosphate abnormalities. 44.9% had dengue, of those 37.5% developed dengue hemorrhagic fever. Most patients (86.5%) were asymptomatic despite low calcium concentrations. Only 24% required intravenous calcium to normalize their calcium levels. The majority (84.2%) of patients achieved a complete recovery from their acute illness.

Conclusions and recommendations: This study revealed a higher prevalence of hypocalcemia among hospitalized patients in Sri Lanka compared to the other countries. Male gender is significantly associated with hypocalcemia in hospitalized patients. In addition, menopause and chronic kidney disease are other two independent variables which are significantly associated with hypocalcemia. Due to the paucity of the literature in Sri Lanka, further studies on the topic are highly recommended.

Key words: hypocalcemia, medical wards, Sri Lanka