

## CASE REPORT ON SYMPTOMATIC HYPOCALCEMIA ASSOCIATED WITH ACUTE SEVERE MALARIA - NEED FOR VIGILANCE

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### BACKGROUND

The commonest cause of hypocalcemia is hypoalbuminemia and its presentation varies widely, from asymptomatic to life-threatening situations. Hypocalcemia is frequently encountered in patients who are hospitalized. Depending on the cause, unrecognized or poorly treated hypocalcemic emergencies can lead to significant morbidity or death

### CASE

A 25 year-old Polytechnic student who presented at the emergency department with a 5-day history of high grade fever (39.2°C) with chills and rigor, generalized body weakness, postprandial vomiting, epigastric pain and passage of melena and feeling of cramps in her hands and feet. Has no history of PUD but had used NSAIDs for pains and the cramps. Her RBS was 155mg/dl. Genotype unknown. Pregnancy was excluded. Her clinical examination showed an acutely ill-looking, febrile (T 39.2°C), not pale, anicteric, nil pedal edema, demonstrable carpopedal spasms  
P84/min irregular, normal volume  
BP 133/103mmHg, by next day 111/81mmHg

### RESULTS

Total calcium - 1.37 (2.1 - 2.5) mmol/L (at admission)  
Total Calcium - 1.8 (2.1 - 2.5) mmol/L (next day after Ca gluconate infusion)  
Total Calcium - 2.16 (2.1 - 2.6) mmol/L (5<sup>th</sup> DOA)  
Corrected calcium 2.34 (2.1 - 2.6) mmol/L (5<sup>th</sup> DOA)  
Albumin 30.05 (35 - 50) g/L  
Phosphate 1.89 (1.0 - 1.5) mmol/L  
Electrolytes – normal  
Urea 2.13 (2.5 - 8.0) mmol/L

Creatinine 80.48 (45 - 110) umol/L  
Magnesium 0.86 (0.7 - 1.15)mmol/L  
Phosphate 0.97 (0.8 - 1.4)mmol/L (5<sup>th</sup> DOA)  
PTH 38.6 ( )pg/ml  
TFT normal  
Abdominal and Neck USS No parathyroid enlargement and no abdominal abnormality  
CBC Hb 12.7g/dl, low MCV and MCH.  
Normal WBC  
ECG findings Sinus rhythm, APCs, prolonged QTc

### MANAGEMENT

She was treated as a case of acute severe malaria with hypocalcemic tetany and upper GI bleeding  
She got better with 10% calcium gluconate infusion, anti-malarial and parenteral rabeprazole. Was discharged on the 5<sup>th</sup> DOA to MOPD for follow up on oral calcium supplements and rabeprazole

### CONCLUSION

A high index of suspicious is necessary in order not to miss the diagnosis of hypocalcemia, particularly if it presents with an unrelated medical illness such as malaria fever