

SUMMARY

Calcium plays an important role in the regulation of enzyme reactions, transmission of electric impulse in the neurones, muscular contraction, lactation, secretion of gastric juices and renal concentrating ability.

Hypocalcaemia occurs as suggested by several authors as excision of parathyroid, or more commonly interference with their blood supply. In thyrotoxicosis it may be due to rapid excretion of calcium to bone and may be due to preoperative suppression of parathyroid activity by the hypercalcaemia of hyperthyroidism.

Hypocalcaemia in acute pancreatitis is probably multifactorial in origin. Sequestration of calcium in deposits of fat necrosis may be the most important factor.

Hypercalcaemia is being recognized more often due to multiple channel biochemical analysis of patient serum. Symptoms of overactivity of parathyroid gland are usually due to single or multiple adenoma, hyperplasia of all 4 glands or carcinoma. A single adenoma is the commonest finding, primary hyperplasia is a disease of the 6th decade.

An elevated serum calcium level associated with malignant tumours is most commonly seen in the presence of osseous metastases. However hypercalcaemia may be found as a nonmetastatic phenomenon in patients with cancers of non parathyroid origin.

Hypercalcaemia in thyrotoxicosis may be due to an increased bone resorption and it is not associated with an elevated parathyroid hormone levels.