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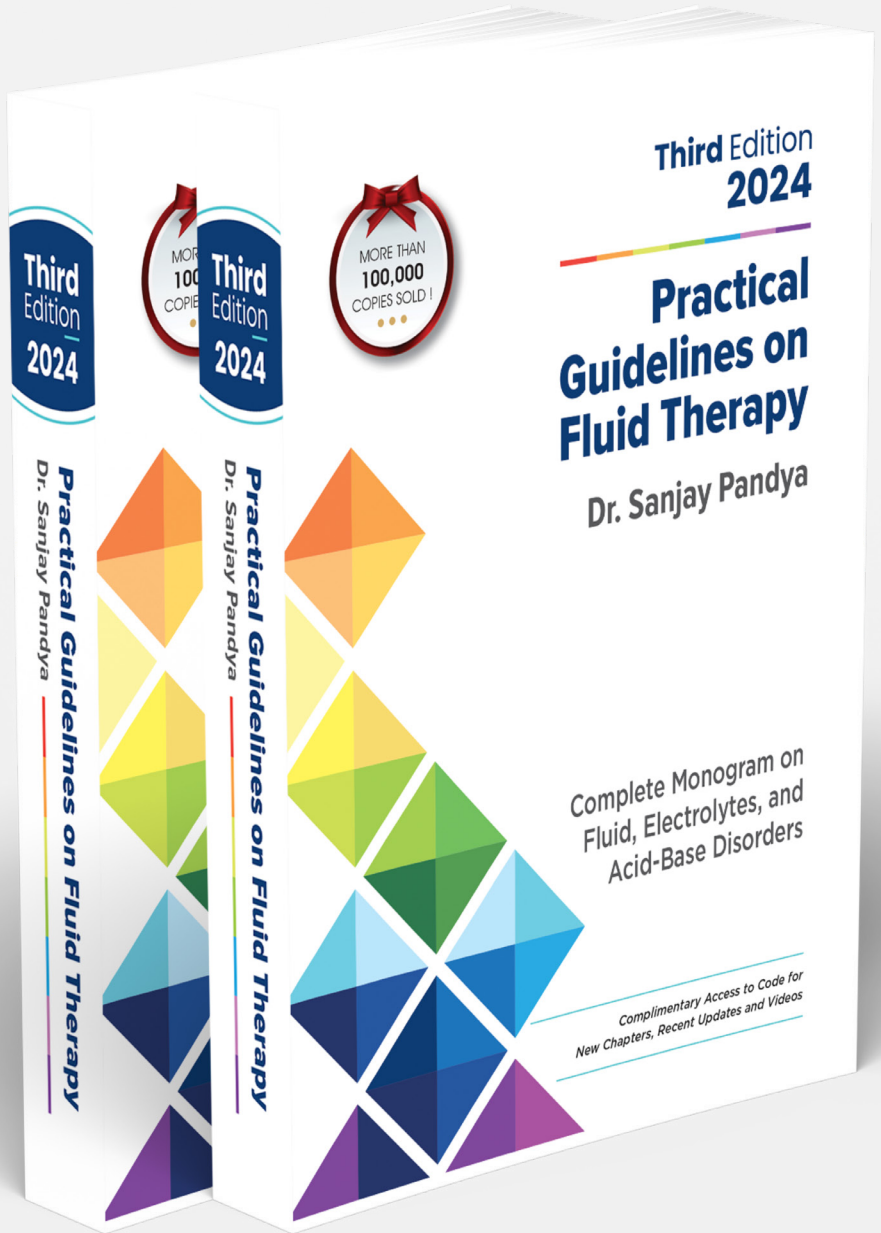
Chapter 25:
Hypercalcemia



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25 Hypercalcemia

Hypercalcemia is a less common disorder than hypocalcemia, occurring in about 0.6–7.5% of hospitalized and less than 1.0% of outpatients [1–6].

Hypercalcemia is defined as total serum calcium >10.5 mg/dL (>2.6 mmol/L) with normal serum albumin or ionized calcium >5.2 mg/dL (>1.3 mmol/L) [7].

When total serum calcium is >14.0 mg/dL (>3.5 mmol/L) or ionized calcium is >7.0 mg/dL (>1.7 mmol/L), it is considered severe hypercalcemia [7]. Early detection and prompt treatment of hypercalcemia are essential because it carries high morbidity and mortality [7, 8].

ETIOLOGY

Primary hyperparathyroidism and malignancy are the two most common causes of hypercalcemia in more than 90% of patients [7, 9]. In recent times, there has been a significant rise in hypercalcemia due to Vitamin D toxicity.

Mechanisms by which different etiologies cause hypercalcemia are enhanced bone resorption, increased intestinal absorption, or decreased renal calcium excretion (Table 25.1).

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