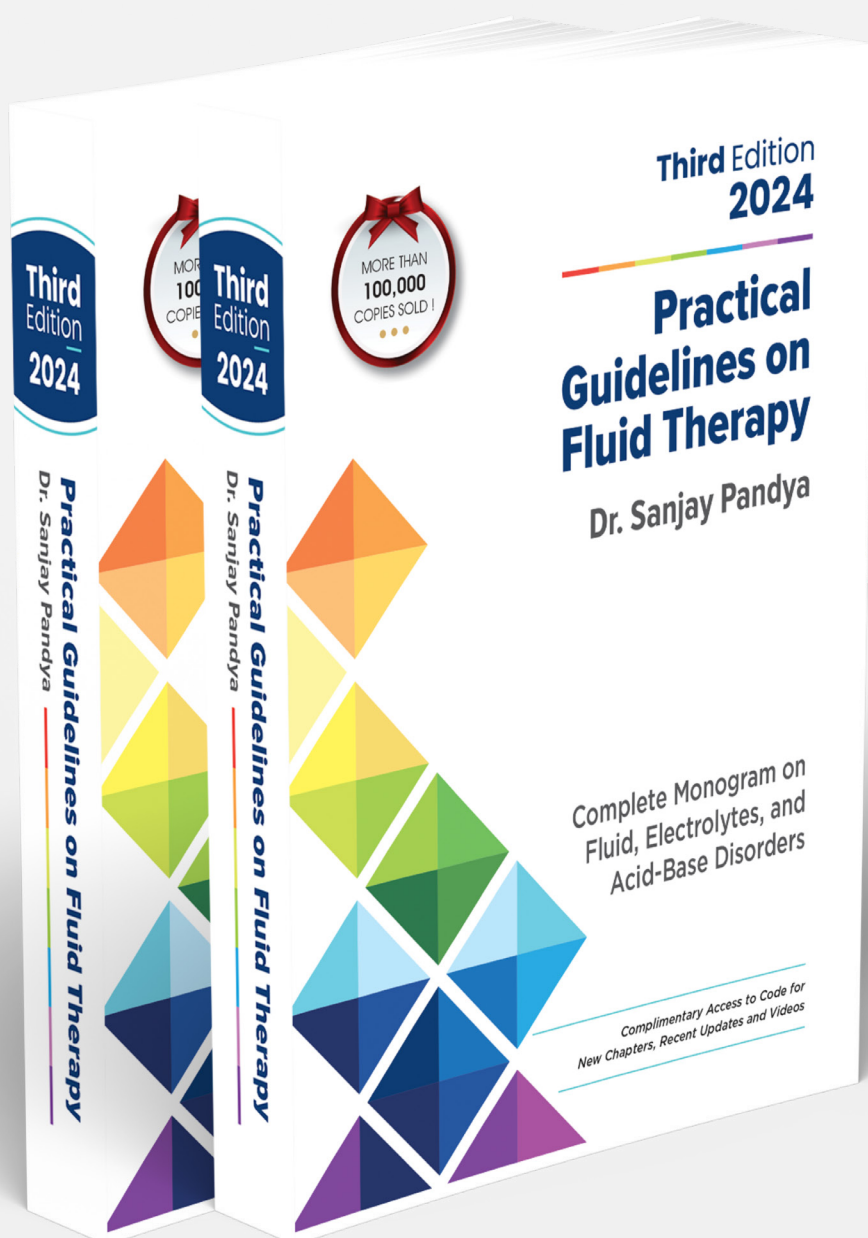


## Chapter 21: Hyponatremia



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# 21

## Hypernatremia

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Hypernatremia is an electrolyte disorder defined as an increase in plasma sodium concentration greater than 145 mEq/L, always results in hypertonicity (hyperosmolality), and usually occurs due to lack of water, loss of water, or primary sodium gain [1, 2].

Hypernatremia is a less frequent disorder (about 1%–3% of all hospitalized patients and 9% in critically ill patients) but carries significantly higher mortality (about 40–60%) [3–5].

**HYPERNATREMIA IS USUALLY DUE TO WATER DEFICIT AND NOT SODIUM OVERLOAD.**

Normal thirst is the most potent mechanism that effectively prevents hypernatremia. So, hypernatremia usu-

ally does not occur in healthy adults who can respond to thirst unless there is non-availability of water, restricted water intake, impaired thirst, or the patient cannot drink the water due to a comatose-confused state. Therefore, hypernatremia is seen chiefly in very young, very old, very sick, bed-ridden, or debilitated patients. A pure water deficit leading to hypernatremia is called dehydration.

### ETIOLOGY

Common causes of hypernatremia classified based on volume status, water loss or salt gain, urinary sodium, and underlying etiologies are summarized in Table 21.1.

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