CME INFORMATION

Diagnosis, Evaluation, and Treatment of Hyponatremia: Expert Panel Recommendations

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Program Overview

Hyponatremia is the most common disorder of electrolytes encountered in clinical practice. Although many cases are mild and relatively asymptomatic, hyponatremia is nonetheless important clinically because of the potential for substantial morbidity and mortality. Despite knowledge of hyponatremia since the mid-20th century, this common disorder remains incompletely understood in many basic areas because of its association with a plethora of underlying disease states, and its causation by multiple etiologies with differing pathophysiological mechanisms. Optimal treatment strategies have not been well defined, both due to these reasons, and because of marked differences in symptomatology and clinical outcomes based on the acuteness or chronicity of the hyponatremia. The approval of the first vasopressin receptor antagonist (vaptan) in 2005 heralded the beginning of a new era in the management of hyponatremic disorders. Since then the field has evolved considerably, including new data on previously unrecognized morbidities and mortalities associated with hyponatremia, the approval of a second vaptan, and additional clinical experience with vaptans and other therapies for the treatment of patients with hyponatremia. In view of this, a panel of experts in hyponatremia was convened in 2012 to update the panel's earlier recommendations for the evaluation and treatment of hyponatremia.

Target Audience

This activity was designed to meet the needs of endocrinologists, hepatologists, nephrologists, gastroenterologists, cardiologists, internists, emergency room physicians, pharmacists, and any healthcare provider who is likely to encounter patients with hyponatremia.

Faculty

Joseph Verbalis, MD (Consensus Panel Chairman)
Professor of Medicine and Physiology
Chief of the Division of Endocrinology and Metabolism
Co-Director of the Georgetown-Howard Universities Center for Clinical and Translational Science
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Educational Activity Goal

Given new developments in the field of hyponatremia and its management—along with high interest by the multitudes of clinicians who see hyponatremia in their practices and/or hospitals—the need is clear for current, evidence-based recommendations to fill the demonstrated educational and practice gaps of treating physicians. These evidence-based, expert-authored recommendations will reflect current scientific and treatment realities of hyponatremia management. By completing this activity physicians should be better educated concerning: (1) risks for morbidity and mortality associated with hyponatremia; (2) recognition, accurate diagnosis, and assessment of hyponatremia; and (3) strategies for managing the condition—in cooperation with other specialists—based on clinical signs, biochemical measurements, risk factors, symptoms, rate of onset, and underlying causative factors.

After completing this activity, learners should be able to:

- Identify and assess patients at risk for hyponatremia.
- Achieve timely and effective diagnosis and management of patients with hyponatremia, taking into account the effects of underlying comorbid conditions and diuretic usage.
- Carefully monitor and control the rate of correction of serum sodium levels in patients with chronic hyponatremia to avoid permanent and potentially fatal neurologic complications.
- Balance the potential interactions of one treatment with another to achieve optimal resolution of both the hyponatremia and the underlying disease(s).

Core Competencies for Quality Patient Care

This educational activity primarily addresses Medical Knowledge core competency as defined by the Accreditation Council for Graduate Medical Education/American Board of Medical Specialties Competencies. Secondary competencies addressed by this activity include Patient Care and Procedural Skills, as well as Practice-Based Learning and Improvement.