

Letter to Editor

Thirst management as a key factor in optimizing quality of life for patients with heart failure

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Dear Editor,

Heart failure (HF) is a chronic, progressive disease characterized by a wide spectrum of symptoms due to cardiac dysfunction and is associated with high morbidity, mortality, and healthcare costs. It is a global health issue with a rapidly increasing prevalence. The prevalence of HF in adults ranges 1% to 3% and more than 64 million people worldwide are living with HF. This number continues to rise due to demographic changes and improved survival after acute cardiovascular events.^{1,2} HF imposes a substantial economic burden, largely driven by frequent hospitalizations and associated healthcare costs. Recent studies estimate that the total economic burden of HF is approximately \$108 billion annually, including direct costs and indirect costs such as lost productivity. Hospitalizations are the largest single contributor to expenses. For example, in the United States, HF-related hospitalizations are projected to grow significantly due to the aging population and rising disease prevalence.^{3,4}

Despite notable advancements in pharmacologic and device-based therapies, the prognosis remains poor, with a five-year mortality rate approaching 50%.⁵ Given these alarming statistics, it is essential to address all aspects of HF management, including commonly overlooked symptoms such as thirst.

Thirst is a prevalent and distressing symptom in patients with HF, often exacerbated by the diuretics used to manage fluid overload. While diuretics effectively reduce congestion and edema, they can decrease plasma volume and increase serum osmolality, leading to increased thirst.⁶ Additionally, neurohormonal activation, a hallmark of HF, contributes to excessive thirst. Antidiuretic hormone (ADH) and the renin-angiotensin-aldosterone system (RAAS) play key roles in fluid retention and thirst regulation.⁷ According to one study, 70% to 80% of patients with HF, experience thirst, which can lead to non-adherence to fluid restriction

protocols and worsening symptoms.⁸

Uncontrolled thirst has significant adverse effects in patients with HF. One study highlighted that severe thirst can lead to increased fluid intake, exacerbating symptoms and being associated with a 30% increase in hospitalization rates and a 25% increase in mortality over a two-year period.

Adherence to fluid restrictions is critical, as nonadherence may worsen outcomes and reduce quality of life (QoL). These findings emphasize the importance of developing effective thirst management strategies to improve HF outcomes.^{9,10}

Managing thirst in patients with HF requires a comprehensive approach. Pharmacological interventions may include adjusting diuretic therapy to balance fluid elimination with thirst control. Adjusting diuretic dosages and using medications that influence neurohormonal pathways, such as RAAS inhibitors, can help mitigate thirst.¹¹ Vasopressin antagonists such as tolvaptan have shown promise in reducing thirst by targeting the ADH pathway without significantly disturbing fluid balance.¹⁰

Non-pharmacological strategies are also crucial. Methods such as providing ice chips or cold air and encouraging mouth rinsing can help alleviate severe thirst.^{12,13} Dietary changes, especially low-sodium intake, may reduce fluid retention and associated thirst. Furthermore, educating patients about fluid restriction and thirst management can improve adherence and symptom control.¹⁴

However, integrating thirst management into routine HF care faces several challenges. A key barrier is the lack of standardized guidelines for managing thirst in patients with HF, which leads to inconsistent care and suboptimal outcomes. Further research is needed to develop and validate evidence-based guidelines for thirst management, focusing on identifying the most effective interventions and evaluating their long-term impact on

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clinical outcomes, including hospitalizations, mortality, and quality of life.¹⁵

Additionally, education of healthcare provider is vital. Clinicians must recognize thirst as an essential aspect of HF management and incorporate thirst-management strategies into patient care plans. Ongoing professional development can improve understanding of the physiological mechanisms underlying thirst and highlight its importance in HF treatment.¹⁶

In conclusion, thirst is an often underestimated but crucial component of comprehensive HF care. Effective thirst management can significantly improve adherence to fluid restrictions, reduce hospitalizations, and enhance functional status. Future research should focus on developing standardized approaches and practical interventions for thirst management and educating healthcare professionals about this essential aspect of HF care. By addressing thirst more effectively, we can improve the quality of care and outcomes for patients living with HF.

Competing Interests

The author has no conflicts of interest.

Ethical Approval

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