

World Journal of Cardiovascular Diseases

Special Issue on

Frontiers in Cardiovascular Medicine - Use of Vasodilators and Diuretics in Acute Heart Failure

It has become apparent since a number of years now that the looming epidemic of heart failure calls for systematic approaches to be tailored to the needs of individual patient phenotypes, if a halt or a decrease in heart failure morbidity and mortality is to be envisaged for the next decade.

As new data is accumulating with regard to the pathophysiological changes in acute heart failure and to the short and long term effects of currently used therapies, we may be witnessing a paradigm shift in the manner we plan and deliver management strategies to fit particular stages belonging to the natural history of heart failure.

Clinical and epidemiological evidence derived from studies carried out in US, Canada, Japan, Western and Eastern Europe indicate that patient characteristics at presentation to the ED, the background aetiologies, precipitating factors, and co-morbidities in patients with AHFS are very heterogeneous across the world as well as across regions. Very heterogeneous are also the treatment and intervention strategies as well as the overall management of these patients, from the time of admission to the ED to their long-term follow-up. For example, nitroglycerine is used in 2.5% of the patients in US, 24.4% in Western Europe and 32.8% in Eastern Europe; carperitide, a recombinant form of alpha-hANP, is used in 69.4% of patients in Asia-Pacific region. Length of hospital stay in the latter region is 21 days on average as opposed to only 5 days in US and 11 days in Europe. A common denominator, however, is the extensive use of loop diuretics in up 90% of patients, in all regions. In this respect, a one-size-fits-all pattern seems to be deeply embedded in the emergency department routines in an almost universal manner, assumably, to the benefit of the patients receiving these.

A wealth of evidence accumulating since more that 10 years now, indicate that addition of vasodilators to diuretics in patients with AHF is highly beneficial while, in the same time drawing attention to the risk of excessive hypotension and consequent deleterious renal effects. As a matter of fact, current experience from clinical practice as well as from clinical research exploring concomitant use of vasodilators and diuretics indicate large variability in the doses and mode of administration of diuretics, suggesting more of a "trial and error" pattern, likely to render the results of such trials being heavily confounded, rather than a scientifically sound intent to discern between two distinct effects and assess the potential additive effect of the two drugs administered simultaneously, albeit, according to well established procedures.

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In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on exploring **Frontiers in Cardiovascular Medicine - Use of Vasodilators and Diuretics in Acute Heart Failure**.

Authors should read over the journal's <u>Authors' Guidelines</u> carefully before submission, Prospective authors should submit an electronic copy of their complete manuscript through the journal <u>Paper</u> Submission System.

Please kindly notice that the "**Special Issue**" under your manuscript title is supposed to be specified and the research field "*Special Issue- Use of Vasodilators and Diuretics in Acute Heart Failure* " should be chosen during your submission.

According to the following timetable:

Manuscript Due	January 31, 2013
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