

## Hypertensive Emergencies: Time for Guidelines

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Hypertension remains the “silent killer”. Over 72 million Americans suffer from this condition and it is estimated that as many as 1 billion people worldwide may have it [1]. Critical care clinicians are likely to encounter patients with this malady. Indeed, one percent of patients with essential hypertension (HTN) will develop at some point in their life a hypertensive crisis [2].

What is more concerning, is the fact that the mortality from acute severe HTN remains high. The author participated in a multicenter registry to be published in the next few months. In this registry (studying the treatment of acute hypertension or STAT), an alarming number of patients were readmitted within one month of their initial admission for another hypertensive crisis. Moreover, these patients had an in-hospital mortality that exceeded that of congestive heart failure.

In this issue of *Critical Care and Shock*, Benson *et al*, in a large web-based survey, assessed the patterns of drug utilization and management in patients with acute HTN [3]. This original investigation yielded results which are quite interesting and distressing. As the authors indicate, no national practice guidelines exist in the United States for the treatment of patients with acute severe HTN. The authors characterized the utilization patterns of intravenous antihypertensive agents among physicians and clinical pharmacists members of the

Society of Critical Care Medicine (SCCM) and the American College of Clinical Pharmacy (ACCP).

Looking at the patterns of utilization we can infer that despite advances in the understanding and management of this illness, many clinicians continue to utilize agents with poor safety profiles. A remarkably high number of them use sodium nitroprusside in this setting. This is disconcerting as 44 percent of the fractional weight of this agent is cyanide and the therapeutic spectrum is very narrow [4]. Moreover, 36% of respondents had seen patients with cyanide or thiocyanate-induced toxicity [3]. So, why do we still use agents that are potentially lethal?

In many instances, and in many countries, the lack of other intravenous antihypertensive agents is the primary concern. However, in Western countries, where other agents are available (i.e., nicardipine, clevidipine, labetalol) misinformation and lack of knowledge are the primary reasons for clinicians to utilize these dangerous agents. In the author’s personal experience there are many options for clinicians to utilize in cases of acute severe HTN in a variety of settings [5].

The article by Benson and coworkers reminds us for the need of national practice guidelines in the field of acute HTN. This illness is likely to remain a common cause of long-term disability and still an exceedingly high mortality in acute care medicine.

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