Ultrasound Clarifies Unexplained Hypotension

Search for fluid in the peritoneal cavity or around the heart; rule out gross cardiac abnormalities.

Not enough people get CPR, and not enough people who get CPR get good CPR.

‘If you find free fluid, an effusion, or an [abdominal aortic aneurysm], I guarantee you are going to change the course on that patient.’

CPR Guidelines Specialized for Lone Rescuers of Children and Adults

Pyridostigmine Raises Standing BP in Orthostatic Hypotension

Pyridostigmine significantly improves standing blood pressure in patients with orthostatic hypotension, and it does so without worsening supine hypertension, reported Dr. Wolfgang Singer and his associates at the Mayo Medical Center, Rochester, Minn.

Midodrine is the only drug previously shown in a blinded trial to improve orthostatic hypotension. But midodrine and other adrenergic agonists aggravate supine hypertension, “a major problem” in these patients because their blood pressure fluctuates widely throughout the day. Adrenergic agonists also raise the risk of intracerebral hemorrhage, the investigators said.

Dr. Singer and his associates assessed the effects of pyridostigmine, an anticholinesterase agent, in a study of 58 patients with neurogenic orthostatic hypotension. The 30 men and 28 women had associated multiple system atrophy (17 patients), pure autonomic failure (15), diabetic autonomic neuropathy (11), autoimmune autonomic neuropathy (9), or unspecified neurogenic orthostatic hypotension (6).

On sequential days, the subjects took either oral placebo, 60 mg of pyridostigmine alone, pyridostigmine plus a subthreshold dose of midodrine (2.5 mg), or pyridostigmine plus low-dose midodrine (5 mg).

Pyridostigmine alone or with midodrine alleviated orthostatic hypotension, compared with placebo. The blood pressure fall upon standing was 27.3 mm Hg with pyridostigmine plus 5 mg of midodrine, compared with a fall of 34.0 mm Hg for placebo.

Although the mean improvement in standing blood pressure was modest, a small increase appears to suffice in alleviating symptoms. “Symptomatic improvement in some individuals was dramatic,” the researchers said (Arch. Neurol. 2006;63:www.archneur.com [doi:10.1001/archneur.63.4.noc50340]).

Most patients chose to continue taking pyridostigmine. Of the 29 patients who were available for follow-up 1-2 years later, 20 (69%) were still taking it. And of those 20 patients, 17 (85%) “were extremely satisfied” with the medication and rated their orthostatic symptoms as moderately to markedly improved. Ten patients reported an increased energy level, said Dr. Singer.

—Mary Ann Moon