Cardiac Tamponade and Kussmaul's Sign

To the Editor:

The caveat about streptokinase for vein graft thrombosis by Holmes and colleagues (Circulation 63: 729, 1981) comes at an appropriate time. Amid the many enthusiastic reports of this procedure, cautionary comments by the outstanding Mayo group remind us that sooner or later every new cure finds complications and side effects. Curiously, the authors suspected cardiac tamponade because they detected Kussmaul's sign. This is surprising; that sign does not occur in cardiac tamponade unless there is underlying visceral pericardial constriction. Unfortunately, many physicians of considerable sophistication are not aware of this and references to this sign by distinguished physicians tend to perpetuate the error. Would the authors care to comment on this?

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The authors reply:

To the Editor:

Dr. Spodick's comments on Kussmaul's sign are well taken. Certainly, this sign is most often seen in patients with pericardial constriction. It is not, however, pathognomonic for this condition and has been seen in patients with pulmonary embolism1 and, according to some authors, in patients with acute and chronic pericardial effusion2 3 and restrictive cardiomyopathy.4 In our patient, the finding of major concern was not Kussmaul's sign per se, but the demonstration of a leaking distal aortocoronary vein graft anastomosis as demonstrated by extravasation of contrast medium into the pericardial space. This finding, in addition to hypotension and elevation of jugular venous pressure, prompted surgery.

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References


Corrections


On page II–72, figures 4 and 5 are transposed.


In the legend for table 2, page 511, line 1 should read:

Responses to nitroprusside (NP), 4.5 µg/kg/min i.v. . . .

Line 5 should read:

*Control values on the second day of the study before the initiation of the phentolamine infusion.
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D H Spodick

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