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?

DAVID H. SPODICK, M.D., D. SC.
University of Massachusetts
Medical School
Division of Cardiology
St. Vincent Hospital
Worcester, Massachusetts

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. 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.

DAVID R. HOLMES, JR., M.D.
JAMES H. CHESEBRO, M.D.
RONALD E. VLIETSTRA, M.D.
THOMAS A. ORSZULAK, M.D.
Mayo Clinic
Rochester, Minnesota

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.
Cardiac tamponade and Kussmaul's sign.
D H Spodick

Circulation. 1981;64:1078
doi: 10.1161/01.CIR.64.5.1078

Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 1981 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/64/5/1078.citation

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org//subscriptions/