



SUPERIOR VENA CAVA SYNDROME

■ *To the Editor:* I read with interest the article by Maggiano et al¹ in your January-February 1992 issue, which described an uncommon cause of the superior vena cava (SVC) syndrome—open heart surgery. We previously reviewed the Cleveland Clinic's experience with benign causes of the syndrome and reported 16 cases, with the most common cause being mediastinal granuloma or mediastinal fibrosis secondary to histoplasmosis. One case was related to congestive heart failure.² We also reviewed the English literature on the subject and classified the various causes of benign SVC syndrome up to that date (*Table*). Subsequently, additional cases have been reported related to nocardia asteroides mediastinitis,³ filarial mediastinal lymphadenitis,⁴ benign mediastinal bronchogenic cyst,⁵ and to invasive procedures such as Swan-Ganz catheterization,⁶ central venous catheterization,^{7,8} Hickman-Broviac catheterization,⁹ and LeVein shunting.¹⁰

A case of benign SVC syndrome has also been reported secondary to an infected thrombus presenting as a right atrial mass.¹¹ SVC syndrome as a complication of open heart surgery and cardiac tamponade can now be added to the list of known benign causes of SVC syndrome.

C. VAUGHN STRIMLAN, MD
South Hills Pulmonary Associates, Inc
Pittsburgh

TABLE
REPORTED CAUSES OF BENIGN SUPERIOR VENA CAVA
COMPRESSION SYNDROME

| |
|---|
| Mediastinitis |
| Tuberculosis |
| Histoplasmosis |
| Actinomycosis |
| Syphilis |
| Pyogenic |
| Postradiation |
| Idiopathic |
| Mediastinal tumors |
| Cystic hygroma |
| Substernal thyroid goiter |
| Benign teratoma |
| Dermoid cyst |
| "Benign" mediastinal thymoma |
| Vascular |
| Aortic aneurysm |
| Arteriovenous fistula |
| Vasculitis |
| Congenital superior vena cava aneurysm |
| Bilateral superior vena cava with thrombosis |
| Idiopathic thrombophlebitis with thrombosis |
| Thrombosis accompanying polycythemia |
| Cardiac |
| Atrial myxoma |
| Intrapericardial band |
| Pericarditis |
| Mitral stenosis |
| Surgical bypass in congenital heart disease |
| Complication of ventriculoatrial shunt |
| Complication of transvenous cardiac pacemaker |
| Pulmonary |
| Mediastinal emphysema |
| Pneumothorax |
| Traumatic |
| Mediastinal hematoma |
| Other causes |
| Behçet's syndrome |
| Retroperitoneal fluid |
| Bilateral clavicular osteomyelitis |
| Silicosis |
| Sarcoidosis |

Modified from Chest 1975; 68:32-35, with permission

- Maggiano HJ, Higgins TL, Lobo W, Makos C, Golding LAR. Superior vena cava syndrome after open heart surgery. *Clev Clin J Med* 1992; 59:93-95.
- Mahajan V, Strimlan CV, Van Ordstrand HS, Loop FD. Benign superior vena cava syndrome. *Chest* 1975; 68:32-35.
- Pitchenik AE, Zaunbrecher F. Superior vena cava syndrome caused by nocardia asteroides. *Am Rev Respir Dis* 1978; 117:795-798.
- Seetharaman MB, Brahadur P, Shrinivas V, Subbarao KSVK. Filarial mediastinal lymphadenitis, another cause of superior vena caval syndrome. *Chest* 1988; 94:871-872.
- Miller CD, Walter JP, Cuthaner DF, Mark JBD. Recurrent mediastinal bronchogenic cyst: cause of bronchial obstruction and compression of superior vena cava and pulmonary artery. *Chest* 1978; 74:218-220.
- Santiago SM, Williams AJ. Acute superior vena cava syndrome after Swan-Gantz catheterization. *Chest* 1986; 89:319-320.
- Nottage WM. Iatrogenic superior vena cava syndrome, a complication of internal jugular catheters. *Chest* 1976; 70:566.
- Kanada OJ, Jung RC, Ishihana S. Superior vena cava syndrome due to a retained central venous pressure catheter. *Chest* 1979; 75:734-735.
- Jacobs M, Yeager M. Thrombotic and infectious complications of Hickman-Broviac catheters. *Arch Intern Med* 1984; 144:1597-1599.
- Van Deventer CM, Snyder N, Patterson M. The superior vena cava syndrome, a complication of the LeVein shunt. *JAMA* 1979; 242:1655-1656.
- Dick AE, Gross CM, Rubin JW. Echocardiographic detection of an infected superior vena cava thrombus presenting as a right atrial mass. *Chest* 1989; 96:212-214.