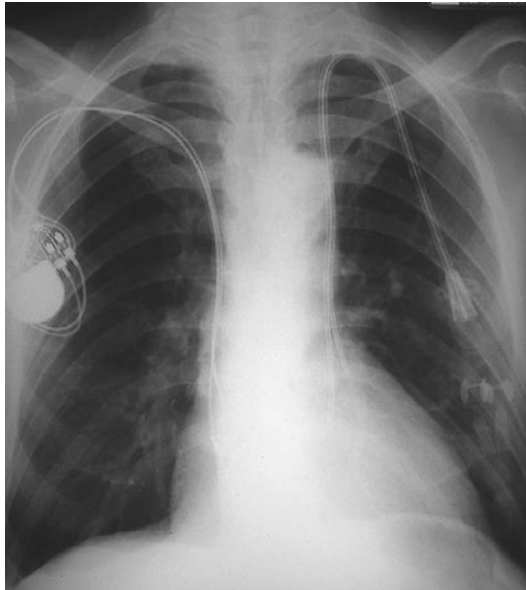


IMAGES IN CLINICAL MEDICINE

Bilateral Superior Vena Cava



Andrew C. Fry, M.R.C.P.
Paul Warwicker, F.R.C.P.

Lister Hospital
Hertfordshire SG1 4AB, United Kingdom
andyfry@doctors.org.uk

A 67-YEAR-OLD MAN RECEIVING HEMODIALYSIS BECAUSE OF KIDNEY FAILURE resulting from renovascular disease was admitted to the hospital for revision of dialysis access. Six months earlier, a dual-chamber, permanent pacemaker had been implanted in the right side of the chest for the treatment of complete heart block. The dialysis catheter, inserted into the left internal jugular vein under fluoroscopic guidance, showed a left superior vena cava draining into the right atrium through a coronary sinus. A chest radiograph showed the pacemaker, with leads in the right subclavian vein and right superior vena cava, and a catheter in the left internal jugular vein and left superior vena cava. Subsequent dialysis was uneventful. The presence of a left superior vena cava is the result of persistence of the embryonic left anterior cardinal vein. It is present in approximately 0.5% of the general population and in 5 to 10% of persons with other congenital heart defects. In 90% of cases in which the left superior vena cava is present, there is drainage through the coronary sinus into the right atrium. The left brachiocephalic vein is usually absent or atrophic, and occasionally the right superior vena cava is absent as well.

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