

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: <http://www.elsevier.com/locate/crvasa>

Case report

Persistent left superior vena cava, absent right superior vena cava and coronary-bronchial fistula: The good, the bad and the ugly (case report and review of literature)



Jiří Plášek^{a,b,*}, Tomáš Veiser^a, David Šípula^a, Miroslav Homza^{a,b}

^a University Hospital Ostrava, Department of Cardiovascular Diseases, 17. Listopadu 1790, Ostrava 708 52, Czech Republic

^b University of Ostrava, Department of Clinical Studies, Syllabova 19, Ostrava 703 00, Czech Republic

ARTICLE INFO

Article history:

Received 23 August 2014

Received in revised form

24 October 2014

Accepted 5 November 2014

Available online 1 December 2014

Keywords:

Isolated/persistent left superior vena cava

Pacemaker implantation

Coronary-bronchial fistula

ABSTRACT

A 62-year-old Caucasian male presented with syncope during casual daily activity without preceding prodromes. During ECG Holter monitoring, we observed numerous asystolic pauses lasting >4 s due to sino-atrial blockade and sinus bradycardia. During pacemaker implantation, persistent left superior vena cava with agenesis of the right superior vena cava was diagnosed. Unproblematic placement of atrial lead was followed by challenging placement of the right ventricular lead. Anterior position with a sharp angulation to the right ventricular wall was achieved with excellent stimulation parameters. Transesophageal echocardiography confirmed the diagnosis of persistent left superior vena cava with agenesis of right superior vena cava. Moreover, selective coronary angiography showed connection between right coronary artery branch and bronchial vessel. To the best of our knowledge, we are the first to describe a combination of persistent left superior vena cava with absent right superior vena cava, coronary-bronchial fistula and conduction abnormality with the necessity of device implantation.

© 2014 The Czech Society of Cardiology. Published by Elsevier Sp.z.o.o. All rights reserved.

Introduction

Persistent left superior vena cava (PLSVC) is a relatively rare venous anomaly but the most common variant of the thoracic venous system. Its prevalence in the general population

ranges from 0.3 to 0.5% and due to its asymptomatic course might have been underestimated in the past [1], though up to 4.3% of patients with congenital heart disease may be affected by the presence of PLSVC [2]. Recently with the rise of imaging techniques PLSVC is most commonly diagnosed during echocardiography or thorax computed tomography. Imaging modalities in the majority of cases are requested for other

* Corresponding author at: 17. listopadu 1790, Ostrava 708 52, Czech Republic. Tel.: +420 597375259.

E-mail addresses: Jiri.plasek@fno.cz (J. Plášek), tomas.veiser@fno.cz (T. Veiser), sipula@email.cz (D. Šípula), miroslav.homza@fno.cz (M. Homza).

<http://dx.doi.org/10.1016/j.crvasa.2014.11.001>

0010-8650/© 2015 The Czech Society of Cardiology. Published by Elsevier Sp.z.o.o. All rights reserved.

reasons, unrelated to the presence of PLSVC. Placement of central venous catheter or pacemaker implantation via left subclavian vein may also reveal PLSVC as the course of the guiding wire circumscribes the left aspect of the heart silhouette on chest X-ray. PLSVC is often associated with both brady- and tachyarrhythmia [3]. To the best of our knowledge, this is the first description of persistent left superior vena cava with absent right superior vena cava, coronary-bronchial fistula and conduction abnormality with the necessity of device implantation. It is particularly important to become familiar with device implantation technique via left superior vena cava, while the conduction abnormalities may be associated with thoracic venous system anomaly.

Case presentation

A 62-year-old Caucasian male presented with syncope during casual daily activity. Due to repetitive syncope, we decided to admit the patient to a standard monitored cardiological ward. During ECG Holter monitoring, frequent asystolic pauses more than 4 s due to sino-atrial blockade were observed both during the day and night. Moreover, sinus bradycardia of 35/min was recorded. During these dysrhythmic events, the patient felt dizzy and weak leading to a presyncopal state. No complete loss of consciousness was observed. According to concomitant chest pain, selective coronary angiography was performed. No

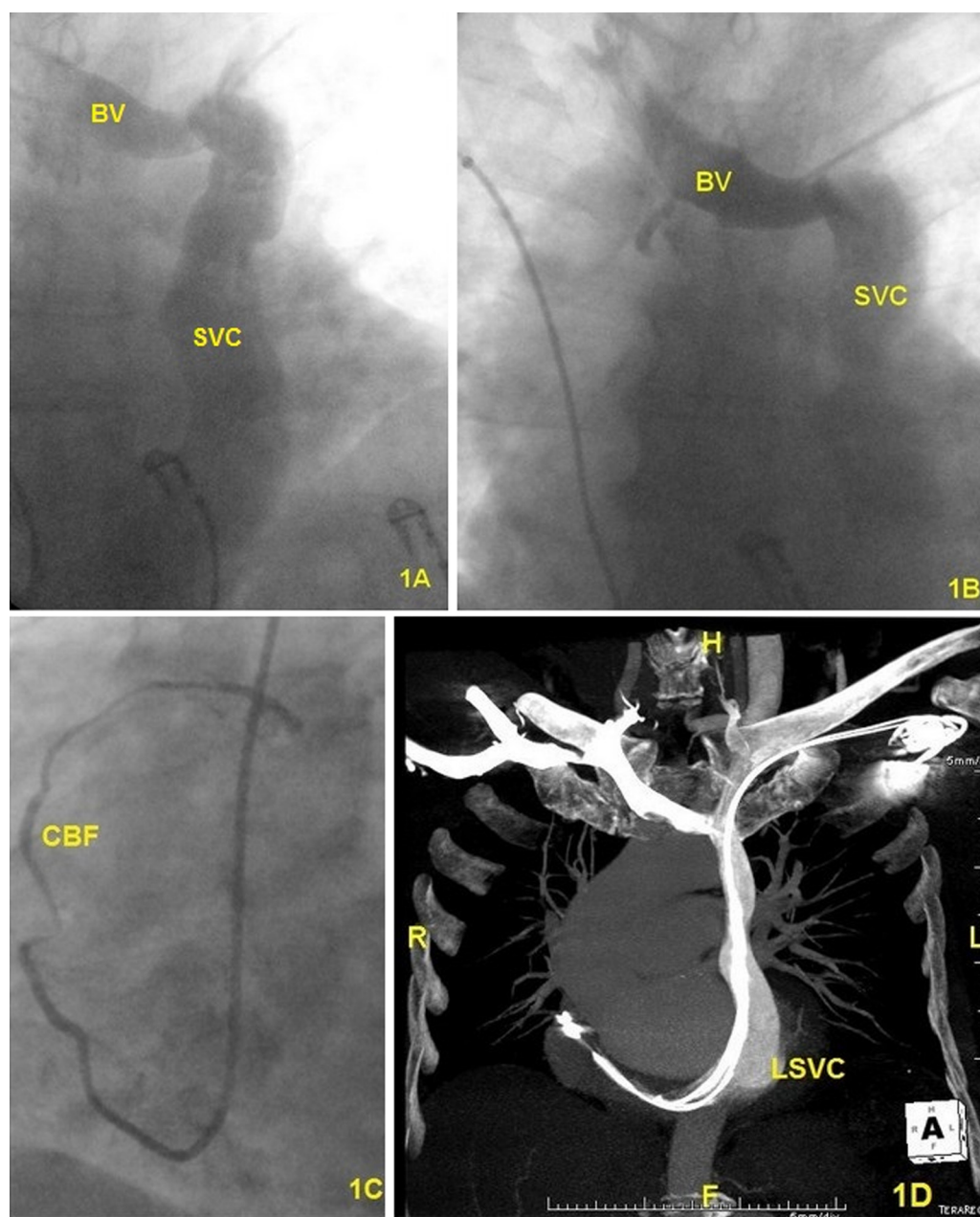


Fig. 1 – (A and B) Postero-anterior X-ray with contrast agent administration (omnipaque), BV – bridging vein, SVC – superior vena cava; (C) selective coronary angiography showing coronary-bronchial fistula; (D) axial computed tomography scan of sole LSVC – left superior vena cava.

Download English Version:

<https://daneshyari.com/en/article/2728380>

Download Persian Version:

<https://daneshyari.com/article/2728380>

[Daneshyari.com](https://daneshyari.com)