ISSN: 2309-5288 (Print)
ISSN: 2309-6152 (Online)
CODEN: JCLMC4

Journal of Coastal Life Medicine

An Uncommon Encounter During Implantation of Temporary Pacemaker - A Double Inferior Vena Cava

Received: 15 February 2023, **Revised:** 17 March 2023, **Accepted:** 19 April 2023

***[1]Dr Vaddera Pranav Theja, [2]Dr N N Anand, [3]Dr.Karthik Ramalingam, [4]Dr.Anand Mohan**

*1Junior Resident, Department of General Medicine, Sree Balaji Medical College and Hospital, Chromepet, Chennai, Tamil Nadu 600044, India.
2Professor & HOD, Department of General Medicine, Sree Balaji Medical College and Hospital, Chromepet, Chennai, Tamil Nadu 600044, India.
3Assistant Professor, Department of General Medicine, Sree Balaji Medical College and Hospital, Chromepet, Chennai, Tamil Nadu 600044, India.
4 Assistant Professor, Department of General Medicine, Sree Balaji Medical College and Hospital, Chromepet, Chennai, Tamil Nadu 600044, India.

Corresponding Author: Dr Vaddera Pranav Theja
Mail ID: thejapranav@gmail.com

Keywords:
Computer tomography abdominal angiography, Transfemoral pacemaker temporary basis insertion, Double inferior vena cava

Abstract
Double inferior vena cavae refers to the variation in congenital area that is caused by embryologi which is unusual- development of cal IVC. It has found double IVC of infrarenal in a female aged 70 years.

1. Case Report:

A female who is 70 years old is presented with different dieases, pain in chest,dyspnea along with syncope episodes for the past ten days. General and systematic examinations of her had found normal with Her systemic and general examinations were normal with 50 min1 pulse rate and 150/90 mmHg of bp. A complete blockage of the heart has been found in ECG with dissociation of atrioventricular.

A hypertrophy that is concentric has been revealed by Doppler echocardiog- raphy at the left ventricle.

A pacemaker insertion on temporary basis are planned for the patient

Angiography is done in coronary by approach of femoral right. Lead of the pacemaker could not be arranged during the procedure through IVC. Right catheter of Judkin could be moved through the right atrium of IVC. Through the vein of the right subclavian a pacemaker had been inserted temporarily.

left-sided IVC with double inferior vena cavae ended at the vein of left renal and right-sided joining IVC. The anterior to the aorta crossing with the left junctures and constriction in right junctures were observed on computed tomography abdominal angiography. (Fig. 1).Through the vein of the right subclavian, later a pacemaker had been inserted permanently.

Abdominal angiography had been completed by computed tomography. It had noted that the left sided cave of double inferior at IC ending on the vein of left renal along with the right IVC joining that is the junction of left and right of aorta anterior crossing. (***Fig. 1***). After that, implantation of a single pacemaker was successfully done through her left subclavian.

ISSN: 2309-5288 (Print)
ISSN: 2309-6152 (Online)
CODEN: JCLMC4
Journal of Coastal Life Medicine

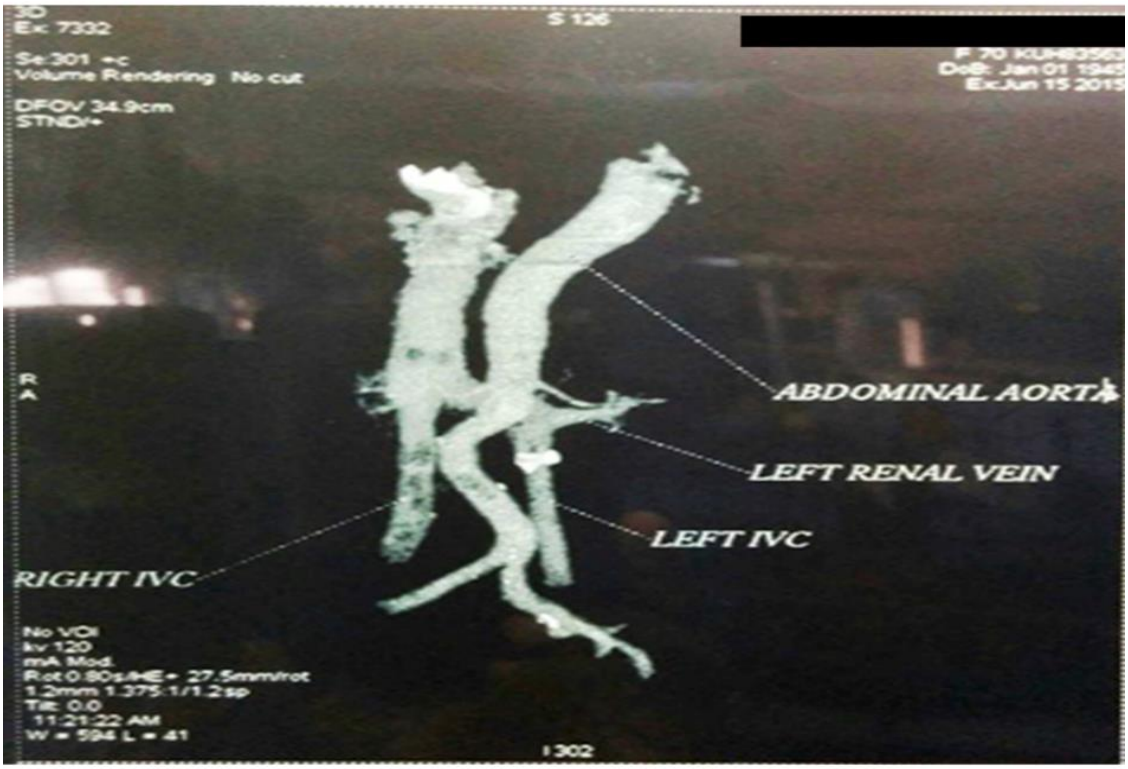

Figure 1 –Double IVC seen in the angiography of CT with IVC at ending of left- sided vein at renal along with joining crossing of right *IVC* anterior to aorta that shows a constriction at the left and right junctures.

2. Discussion:

It has been found that normal IVC for the unilateral system resides on the right side and the system is made up of 4 compounds. These compounds are build up with venous system that is three paired and namely supercardinal, subcardinal and veins of postcardinal:

(1) the right supracardinal vein's infrarenal segment; (2) the right supracardinal and postcardinal anastomoses of the renal segment; (3the right supracardinal and postcardinal anastomoses of the renal segment, and (4) the vitelline vein-derived hepatic segment. Twofold ***IVC*** has resulted in the relapse failure for the supracardinal vein in the left. For the other individuals, the occurrence of IVC anomalies with a percentage of 0.3. The circumaortic left renal vein (1.6 percent to 14 percent), azygous or hemiazygous continuation of the IVC (0.6 percent), retrodortic left renal vein (3.2 percent), double IVC (0.2 percent to 3 percent), and isolated left-sided IVC (0.2% to 0.5 percent) are the most frequently described anomalies of the IVC.

Difficulties during obtrusive strategies such as electrophysiological studies, catheterization in the right heart, a medical procedure of cardiopulmonary detour, catheter headway in femoral vein, channel position of IVC along with brief pacing by the course trans-femoral refers to the unintentional experiences. It has been found that the pass of pacemaker wire has been identified as an accidental encounter. There have been found sudden decreases in the IVC caliber during the angulation at the cave of the left vena and right junction. Thromboembolic events along with Partial or complete thrombosis have been found.

Double IVC probably has a higher rate of thrombus formation for the constriction during aorta crossing. Double IVC related to the clinical outcome becomes acceptable in case it is recognized earlier for encroaching processes to reduce the fatal complexities.

3. Conclusion

Anomalies of caval are able to avert iliac misinterpretation occlusion along with enlargement of lymph-node that is paravertebral or venous collaterals,

ISSN: 2309-5288 (Print)
ISSN: 2309-6152 (Online)
CODEN: JCLMC4
Journal of Coastal Life Medicine

difficulties during processes, thrombosis risk, along with a hemorrhage that is life-threatening in the process of surgeries in abdominal area.

References:

[1] Bass JE, Redwine MD, Kramer LA, Huynh PT, Harris JH. Spectrum of congenital anomalies of the inferior vena cava: cross sectional imaging findings. Radiographics. 2000;20:639–652.

[2] Vijayvergiya R, Bhat MN, Kumar RM, et al. Azygos continuation of interrupted inferior vena cava in association with sick sinus syndrome. Heart. 2005;91:.