A 74-year-old male patient, diabetic, hypertensive, with severe heart disease, with chronic kidney disease in three-week dialysis treatment, a tunneled catheter for hemodialysis is placed in the left internal jugular vein, however, when performing his control in the chest X-ray (Image A), it is observed that the catheter takes a direction towards the left side of the heart, the patient was asymptomatic and with normal vital signs; An angiotomography was requested (Image B, C) in which the presence of an anatomical variant consisting of the persistence of the Left Superior Vena Cava, type IIa in which there is the presence of the two superior vena cava with connection of the persistent left superior vena cava with the right superior vena cava. This anatomical variant is due to the failure to obliterate the left anterior cardinal vein, which results in the persistence of the left superior vena cava (LSVC). This abnormal vein derives from the left anterior cardinal vein and the common cardinal veins. The coronary sinus is dilated and serves as the conduit between the LSVC and the right atrium, and the frequency is about 0.3% to 0.5% a world level (1). The patient is currently receiving hemodialysis sessions through said catheter without inconvenience, it is worth mentioning that the patient is not eligible for the creation of an arteriovenous fistula.

Keywords: Anatomic Variation, Venae Cavae, Diagnostic Imaging.

Conflict of Interest: No conflict of interest was declared by the authors.

Figure 1: Simple chest X-ray after placing the tunneled catheter.
Figure 2: Angiotomography, cross section, showing the union of both superior venae cavae in the sinus

Figure 3: Angiotomography, coronal cut, shows the anatomical distribution of the persistence of the left superior vena cava type IIIa.

References