## 24<sup>th</sup> Annual Resident Poster Day

October 12, 2021



## A Case of a Missing IVC: Always Absent or an Adverse Event?

Laura Saldivar, MD; Tara Cicic, MS3; Dr. Adam Doyle, MD; Dr. Jeffrey Andolina, MD, MS

When taking care of the adolescent or young adult patient, it is important to consider both pathologies of childhood and adulthood. In this case, a patient was found to have significant thrombosis secondary to extensive venous collateralization. The formation of these collateral vessels may represent complications of central catheter placement in childhood or congenital anomaly of the inferior vena cava (IVC). While congenitally absent structures are often expected to show symptoms during childhood, an adult male patient has been reported in the literature to have an absent IVC not diagnosed until age 54 with first deep vein thrombosis (DVT) occurrence. Congenital absence of the inferior vena cava is extremely rare and may present with DVT presumably related to abnormal venous flow. In many patients it is not well understood whether an absent IVC is the consequence of an anomaly of fetal development or a complication of central catheterization in infancy. This is a case of a patient with a common presentation of DVT with an extremely rare finding of extensive venous abnormalities of unclear etiology. While multiple embryologic events leading to IVC absence have been proposed, no single event fully explaining the agenesis has been identified. At the same time, a significant number of young patients with IVC thrombosis have had prior catheterization procedures, proposing the possibility of catheter-induced thrombosis as a cause of eventual agenesis of the IVC.3This case demonstrates that it is important to consider congenital pathologies and birth history in the care of adolescent, young adult, and even older adult patients.