Inferior vena cava agenesis (IVCA) constitutes one of many inferior vena cava congenital anomalies. It is one of the most uncommon anomaly, with an estimated prevalence of 0.0005 – 1% in the general population. Around 5% of patients below 30 years of age with deep vein thrombosis (DVT) have a total or segmental inferior vena cava agenesis.

We report two unique cases of young and previously healthy male patients, one with bilateral DVT, the second one with DVT and pulmonary embolism. Both patients were found with segmental agenesis of the inferior vena cava (Image 1-2, arrow: IVC stump). Treatment was given with ultrasound assisted thrombolysis (EKOS + Alteplase). After 24/48 hrs control venogram, excellent outcome was achieved.

Both patients were discharged with oral anticoagulation and compression stockings. Three and twelve month follow up with no new thrombotic episode.

IVCA should be considered and ruled out as a rare but important risk factor for DVT in patients under 30 years of age. In our experience ultrasound assisted thrombolysis can be considered as a therapeutic option.