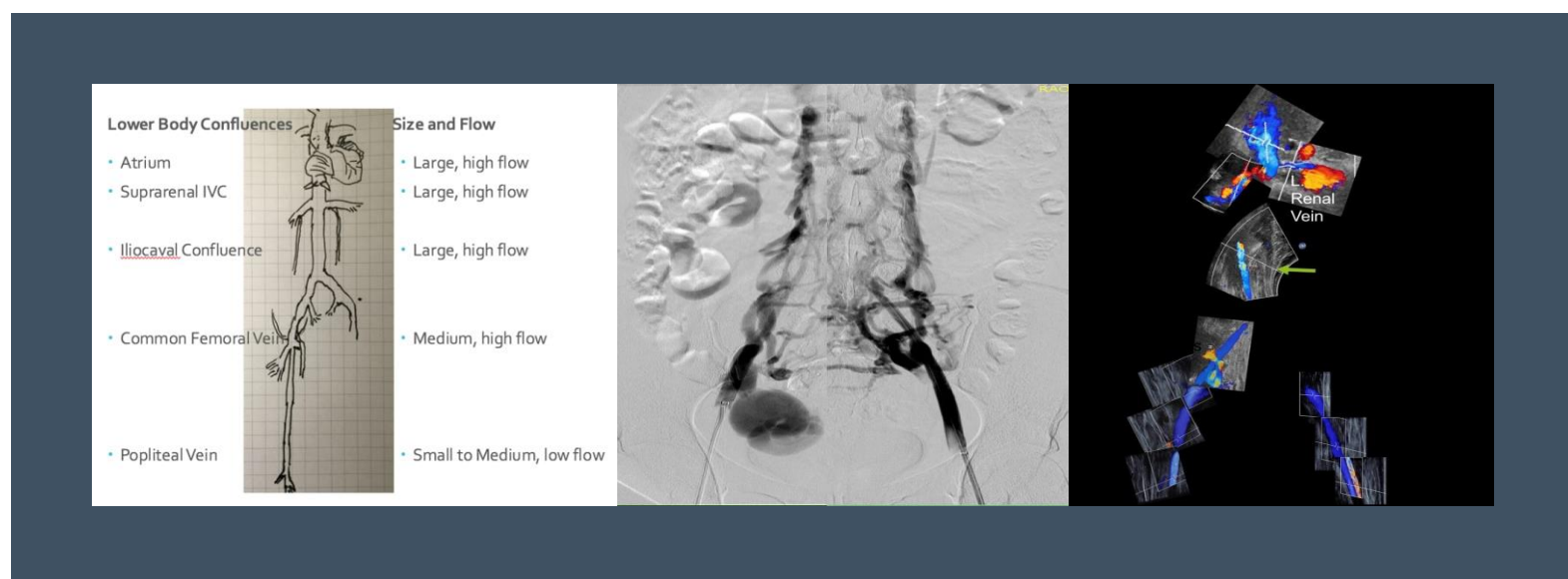


## IVC OBSTRUCTION & LIMITATIONS IN VENA CAVA



## OBJECTIVES

Finding Extrinsic & Intrinsic causes for IVC Obstruction (Syndrome) and Explaining limited role of Endovascular Therapies in challenging situations.

## METHODS

In 10 yrs span 18 patients having both lower limb gross, tender oedema, painful itching, Lipo-dermatosclerosis, Swollen leg with Skin hyperpigmentation and multiple, active leg venous ulcers with purulent discharge in some cases.

• Also presence of abdominal branch varices, venous gangrene and low backpain treated in Endovascular methods with partial success.

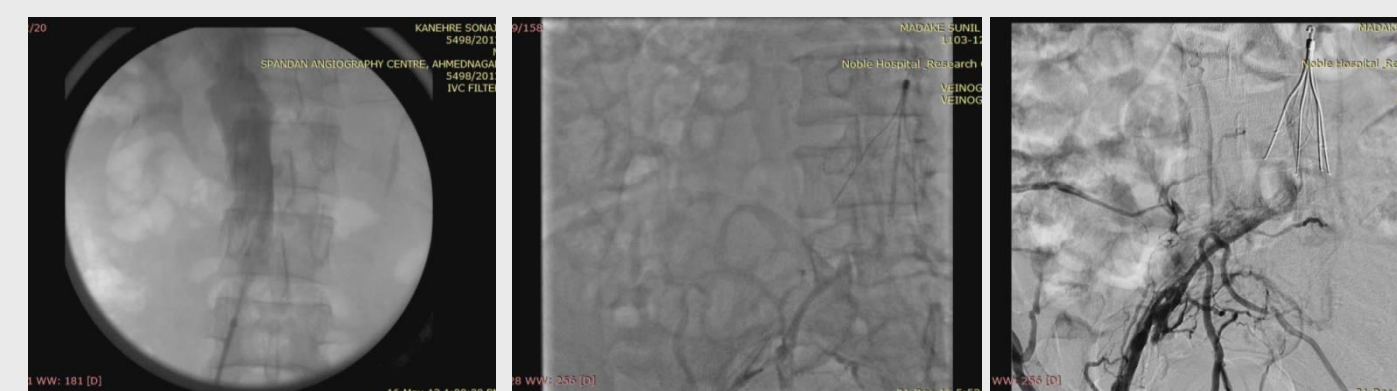
• We have categorised different Causes for IVC Obstruction due to Post thrombotic syndrome with systemic coagulopathy, failed long term Anticoagulation management, Neoplastic & Non-Neoplastic intrinsic obstruction, Post-operative IVC Filter blockages, Malignant & Non malignant Extrinsic IVC Obstruction and even functional obstruction.

## METHODS

**Case 1 : Non neoplastic 'Intrinsic IVC obstruction' due to proximally extending thrombus from ilio-femoral veins & Failed oral anticoagulation....**



**Case 2 : Post operative complications (Clogged IVC filter)**

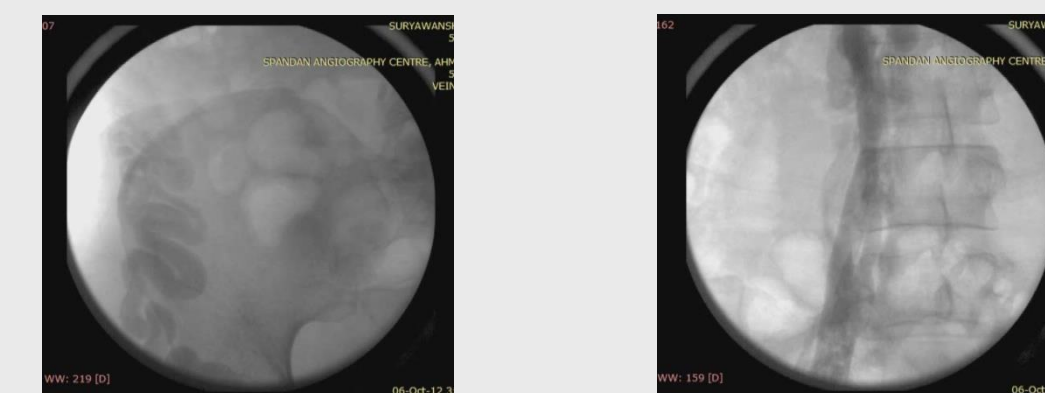


**Case 3 : Extrinsic compression over IVC & iliac veins by Colonic & Pelvic Neoplasms. Malignancy induced DVT & Systemic Coagulopathy.**

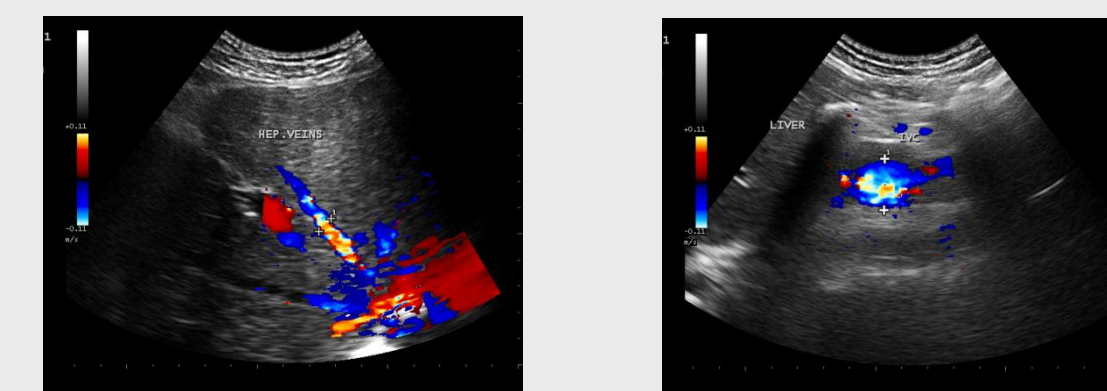


## METHODS

**Case 4 : Hepato-Veno occlusive disease & congenital IVC membrane (Budd-Chiari syndrome)**



Contrast Venography showed multiple, criss crossed Pelvic collateral and bilateral Ascending lumbar veins siphoning deep venous drainage along the side of Chronically occluded IVC.



• 14 Males (24-88 yrs) and 04 females (36-78yrs) sampled for Various reasons of IVC Obstruction.

• Most of these patients has Gross failure of Oral Anticoagulation due to heavy burden of blood clots & bilateral chronic thrombotic occlusion of ilio-caval veins.

• To increase venous inflow → Endo-phlebectomy & A-V fistula creation may be attempted by Vascular Surgeons but it has temporary & limited success.

• To increase venous outflow (IVC to Rt. Atrium) → Trans jugular IVC reconstruction (Intrahepatic IVC repair), Porto-systemic shunting (TIPPS), Hepatic venous stenting can be attempted.

## RESULTS

- Limited role Endovenous therapies & IR management since Poor venous inflow from both Superficial & Deep veins of both legs into pelvic veins.
- Poor venous outflow from Vena cava directly into Right Atrium of heart.
- Well established collateral pathways & Alternative venous drainage, No direct venous access and even Bi-directional wire access via IJV & CFV is failed.
- No immediate danger of Limb amputation unlike Critical Limb threatening ischemia in Arterial occlusion.
- No results guaranteed, Lack of dedication from operating Vascular surgeons & IR Consultants.
- Non availability of proper Cathlab Hardware Materials, lack of educational & training activities are major reasons for full, entire revascularisation of IVC.

## CONCLUSION



**Questions to be answered in future attempts of IVC reconstruction -:**

1. How to reconstruct entire inferior vena cava (Significant planning)?
2. Can we deploy IVC stent via 10Fr. Sheath in Trans-jugular veins with bi-directional wire access?
3. Extra hepatic & Renal IVC stenting to decompress well established 'Deep- superficial-intermediate & portal collateral' pathways?
4. What are the special precautions in IVC reconstructions?

## DISCLOSURES

MAC- Educational Grantee Awardee as per Euro Med Tech Ethical Business Protocol.