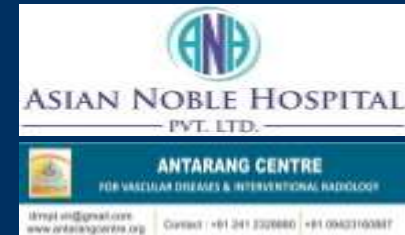




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# INFERIOR VENA-CAVAL OBSTRUCTION – LIMITED ROLE OF ENDOVENOUS THERAPY

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# Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

- Consulting
  - Employment in industry
  - Stockholder of a healthcare company
  - Owner of a healthcare company
  - Other(s)
- 
- I do not have any potential conflict of interest

# OBJECTIVES

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

# METHODS & SOURCES

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 categorized 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.

# Causes Of IVC Obstructions

## Infrarenal part

DVT

Filter occlusion

Malignancy

## Suprarenal part

Malignancy Retroperitoneal  
fibrosis propagation of DVT

## General causes

ex. Thrombophilia

## Retro/suprahepatic

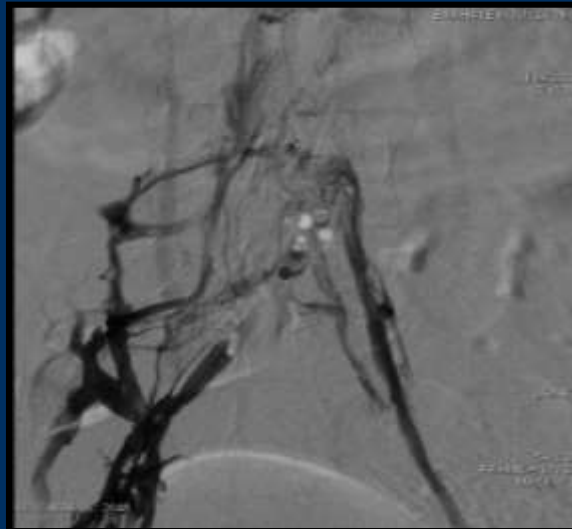
Aplasia

Malignancy

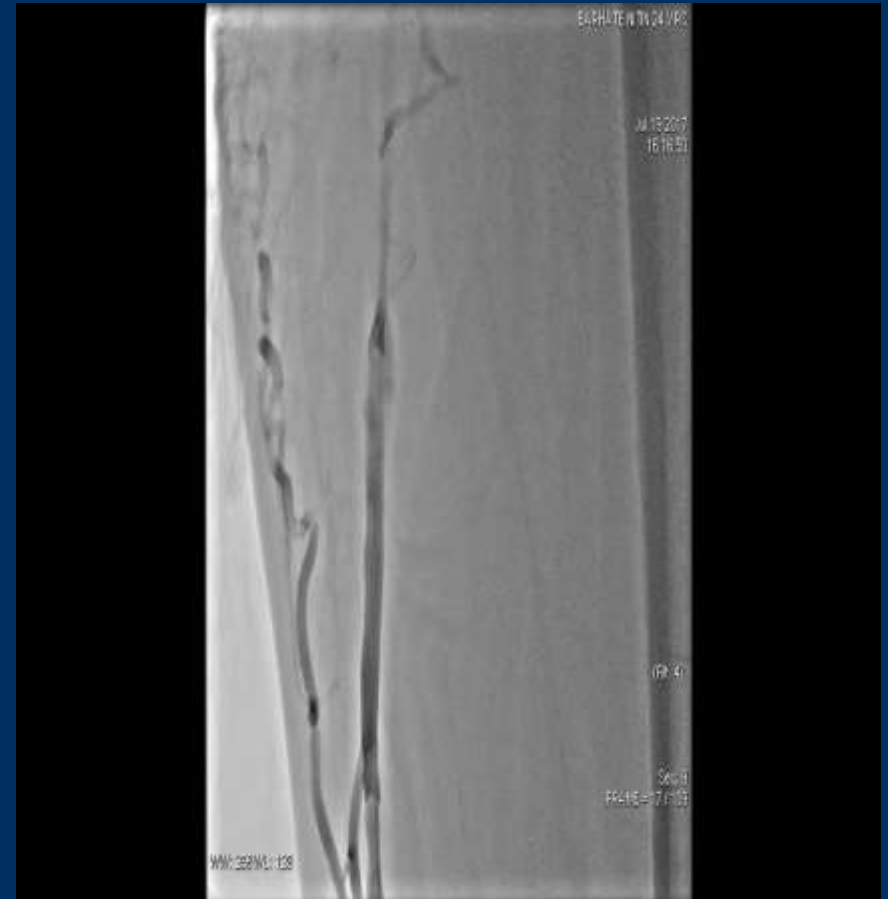
Budd-Chiari syndrome

## Case 1

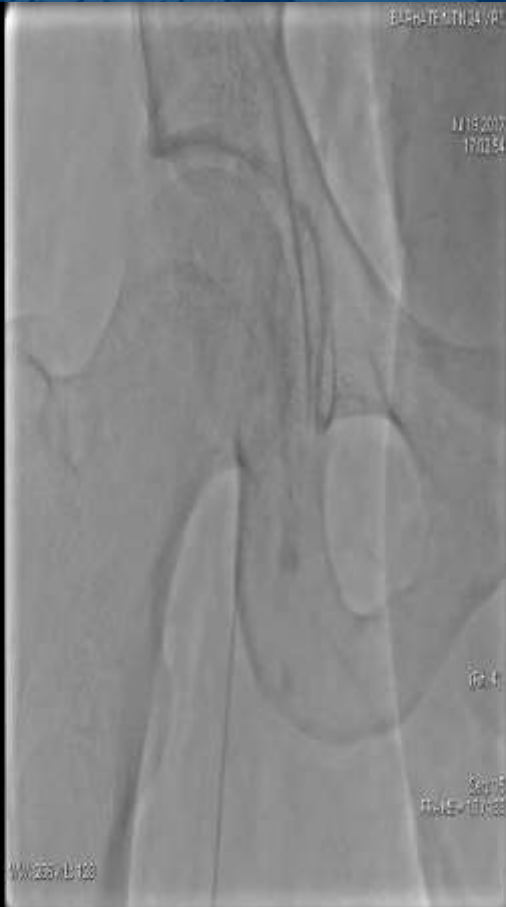
Non neoplastic 'Intrinsic IVC obstruction' due to proximally extending thrombus from ilio-femoral veins & Failed oral anticoagulation



# Both Legs Ascending Contrast Venography



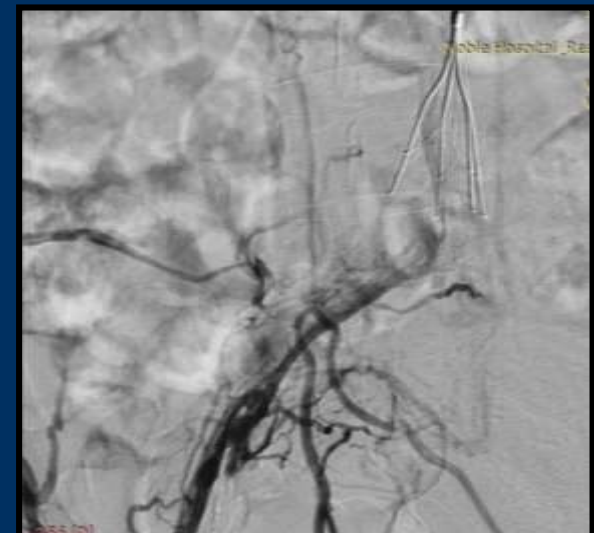
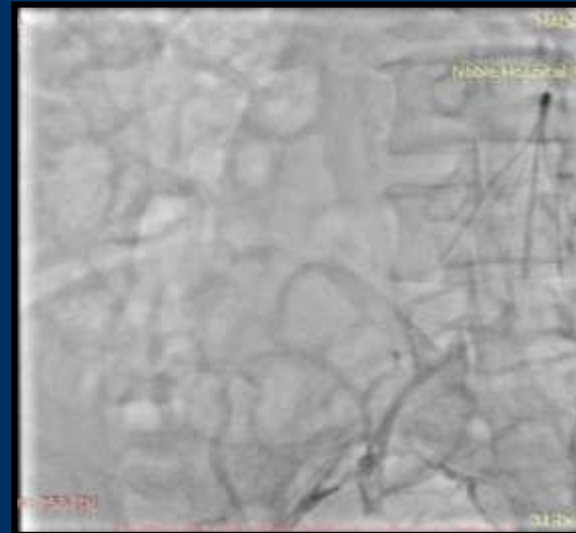
# Pelvic & IVC Venogram





## Case 2

Post operative complications (Clogged IVC filter)



# Filter occlusion in Infra-Renal IVC



## Case 3

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



# Extrinsic compression over IVC & iliac veins by Pelvic Neoplasms



## Case 4

Hepato-Veno occlusive disease & congenital IVC membrane (Budd-Chiari syndrome)



# RESULTS

- ✓ 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.

## 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?



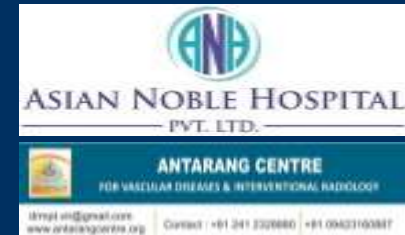
THANK  
YOU

NAMASTE



The logo for LINC (Lateral Intraosseous Nerve Conduction) features a stylized, colorful graphic of a nerve or vessel with red and yellow highlights, set against a dark blue background. The letters "LINC" are positioned to the right of the graphic.

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