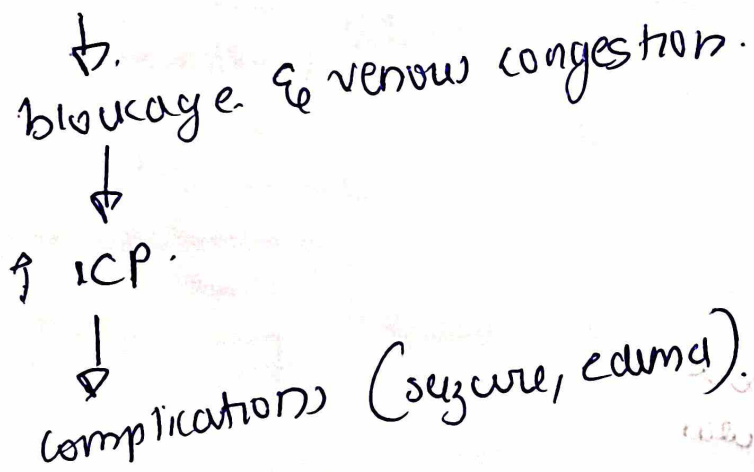


# Cerebral Venous Sinus Thrombosis. CVT

- thrombosis of cerebral veins.
- uncommon form of stroke.
- 0.5 to 1% of strokes.

## definition.

• CVT occurs due to formation of blood clot in dural venous sinuses.



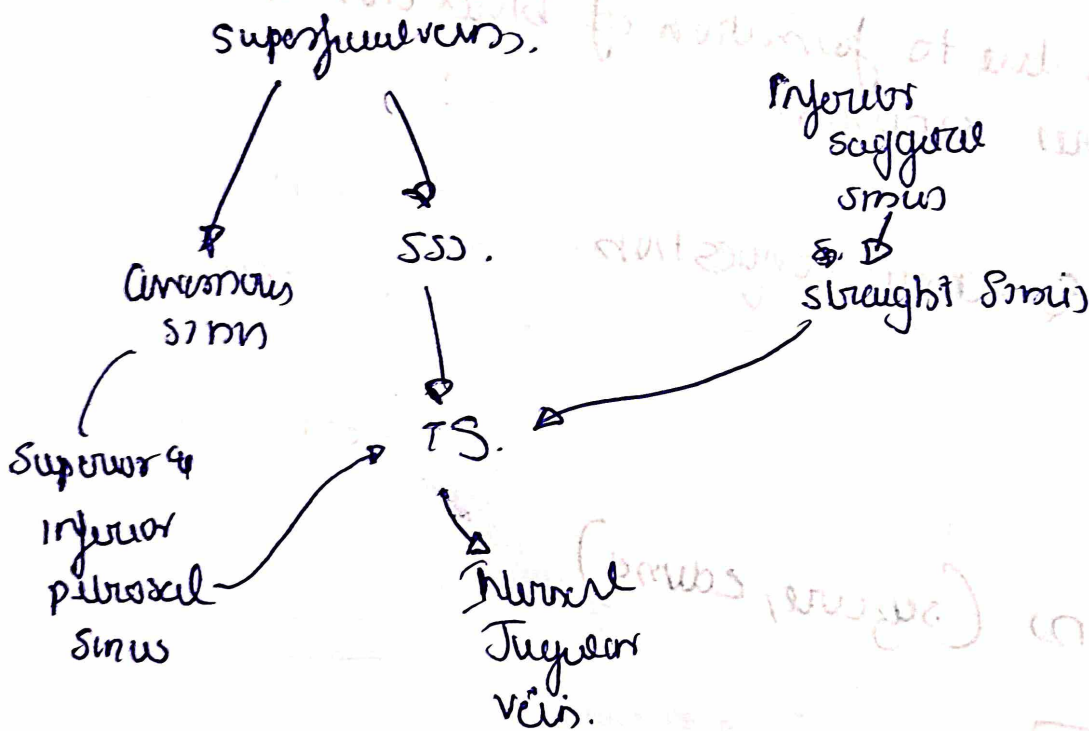
## Epidemiology

Young >> old.  
F : M - 3 : 1  
↳ OCP, APLA.



## Anatomy.

- superficial veins : cortical vein  $\rightarrow$  SSS.
- deep veins : internal cerebral veins etc.
- dural venous sinuses.



pathogenesis,

- thrombus formation
- venous outflow obstruction

varicose veins

stasis      vascular damage.

Hypercoagulability.

## Etiology.

A. prothrombotic states.  
acquired / congenital.

B. local infection;

meningitis, osteomyelitis, sinusitis etc.

C. Trauma or surgery.

E. others.

tamoxifen (drugs) / OCP  
idiopathic.

obstruction of  
venous drainage

↓  
stasis

↓  
thrombosis.

↓  
↑ pressure.

• venous ischemia.

• venous & capillary  
rupture

• cerebral edema.

## Systemic prothrombotic state

Hereditary: Factor V, protein C, deficiencies.

acquired - APLA, Homocystinemia.

• ACP.

## Clinical features

- thunderclap headache.
- encephalopathy.
- focal syndrome - stroke.
- seizures.

Syndromes associated with isolated sinus/vein thrombosis

- ocular signs, orbital pain, proptosis, ocular palsy.

## Clinical diagnosis

Emerging - Non invasive

CT, CTV, MRI,

MRV gold standard

Invasive - ~~angiogram~~

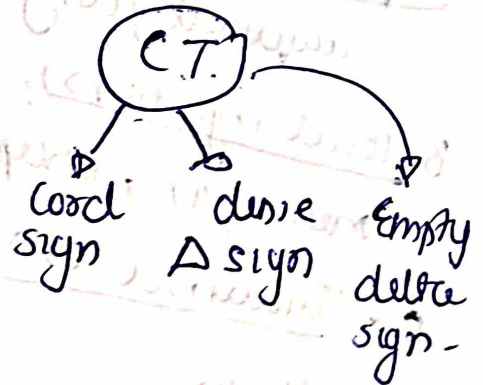
## Lab investigations

- thrombophilia workup. protein C, etc.
- Infection screening
- autoimmune screening

## Management

### Goals.

- relieve symptoms.
- prevent clot propagation.
- treat underlying cause.



- Low heparin, Urifunctional heparin - Dissing clot.
- oral anticoagulants
- ICP  $\rightarrow$  mannitol.
- seizures  $\rightarrow$  Benzodiazepines
- Infection - antibiotics.

emw.

1mg/kg S-C

$\downarrow$   
switch to oral.

Proposed algorithm  
for management of  
CVT.

## Proposed Algorithm for the Management of CVT

