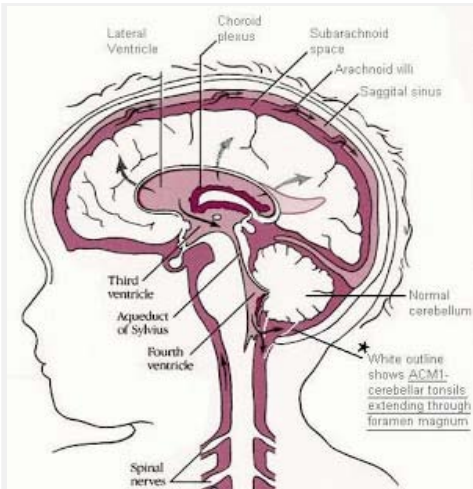
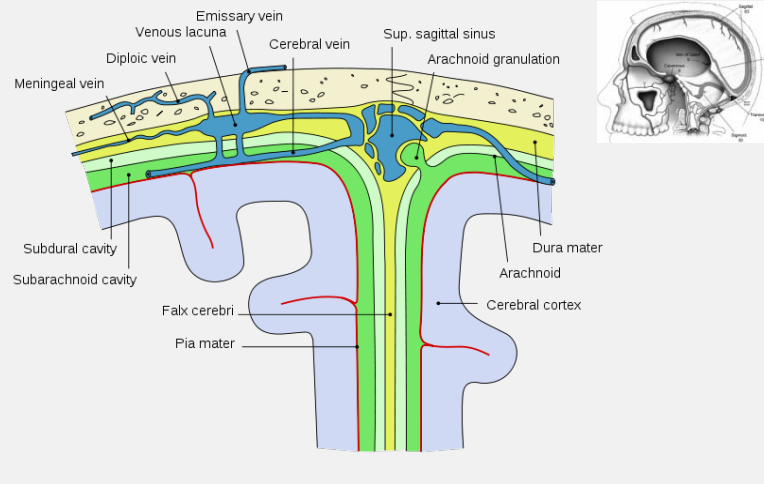


IIH etiopathomechanism disequilibrium of CSF circulation

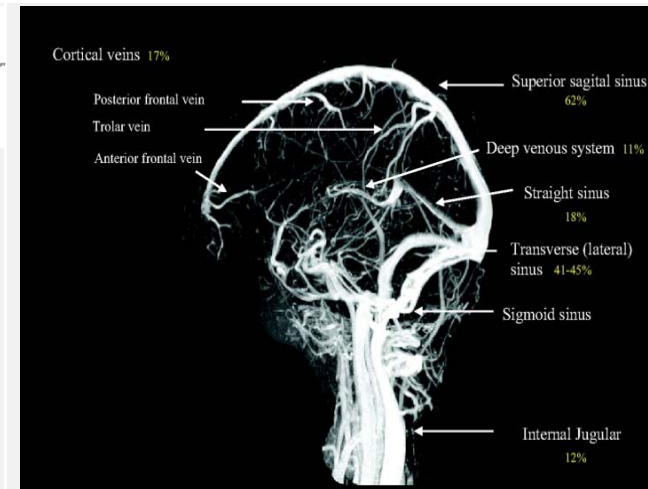
Liquor Production & Circulation



Liquor Absorption



Cerebral Venous Circulation



Diseases:

- Hydrocephalus
- hypersecretion
- obstructive

Therapies:

- diuretic treatment
- shunt: LP, VP
- neurosurgery

Consequences:

- Liquor Absorption Disorder**
- Non-resorption Hydrocephalus**

Diseases:

- **venous vessels disorders**
- **sinus thrombosis**

Therapies:

- **endovascular venous stenting**
- **medicinal treatment**

$$\text{CSF ABSORPTION} = \frac{(P_{\text{CSF}} - P_{\text{SSS}})}{R_{\text{OUT}}}$$

IIH and VST - diagnosis and medication

OCULAR SIGNS

- *AF*
- *papilla edema*
-big blind spot
- *diplopia*

IIH

Neuro-Ophthalmological examination -1.

Liquor absorption defect of Pacchioni granulations (non-resorption hydrocephalus) caused by

- **venous sinus flow defect**
- **VST**

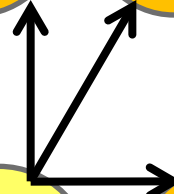
Dg - 3:
both
VVN
+ VFD

Dg - 2:
IC VENOUS VESSEL NETWORK diseases
venous stenosis
hypoplasia
(vessel, network)

Differential dg. examination -2:

- **LP of CSF+LP-pressure**
- **CT – CTven**
- **MR-, MR – AG**
- **Direct Retrograd Cerebral Venography (DRCV) (manometry)**

Dg - 1:
IC - VENOUS FLOW disorders
stasis – thrombosis



IIH and VST - diagnosis and medication

OCULAR SIGNS

- *AF*
- *papilla edema*
-big blind spot
- *diplopia*

IIH

Neuro-Ophthalmological examination -1.

Liquor absorption defect of Pacchioni granulations (non-resorption hydrocephalus) caused by

- venous sinus flow defect
- VST

RIGHT SINUS SYSTEM HYPOPLASIA :
hypoplasia of
s.transversus l.d.
s. sigmoideus l.d.
Stenosis of volume of v. jugularis l.d.

If dg - 3: both

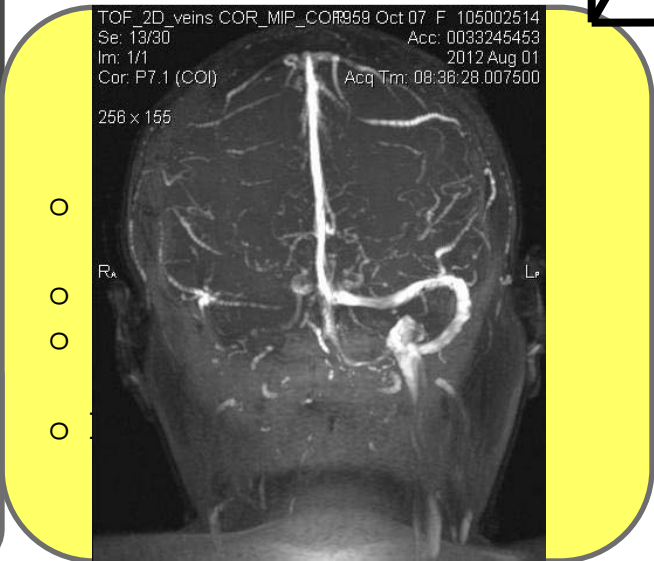
VST + Vflow disorders

STENTING+ anticoagulant, antiaggregant complementary treatments

If dg - 2:

IC - VENOUS VESSEL NETWORK diseases (VST, hypoplasia mpl.)

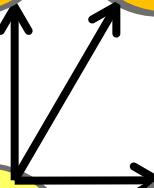
Endovascular - Venous-STENTING neurointervention



If: dg - 1:

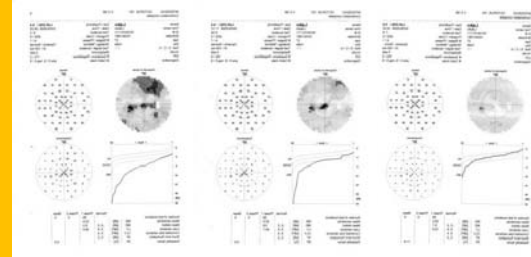
IC - VENOUS FLOW disorders

ANTICOAGULANT + complementary treatments



IIH +/- VST - medication

IF patient has moderate papilledema with evidence of an optic neuropathy („big blind spot syndrome”)



1./ Anticoagulant therapy
*in cases of venous flow disorders
during stent implantation*

2./ Antiaggregant therapy (double)
(Aspirin, Clopidogrel)
*before and after stent implantation
prevention of stent thrombosis after operation - for a year*

3./ ? Thrombolysis ?
risk of intracerebral extensive bleeding

4./ Complementary therapy

**Venous Sinus Stenting
for Idiopathic Intracranial Hypertension
Refractory to Medical Therapy (VSSIIH)**
Athos Patsalides MD,
Weill Medical College of Cornell University

<http://clinicaltrials.gov/ct2/show/NCT01407809>



<http://www.esmint.com/>

- **Cerebral venous thrombosis and stenosis**
- **Endovascular treatment of sinus thrombosis**
- **Treatment of benign intracranial hypertension by stenting of sinus stenosis**