

CEREBROVASCULAR DISORDERS

STROKE :- Abrupt onset of focal/global neurological deficit (FND) lasting ≥ 24 hrs, predominantly vascular origin & evidence of infarction or hemorrhage.

TIA :- Episode of neurological dysfunction caused by focal brain/retinal ischemia lasting < 1 hour w/o evidence of infarction.

MAJOR CAUSES :-

Heroin - Drug abuse

- Age
- Obesity
- HTN
- Smoking
- DM
- Ajib
- Heart disease
- Dyslipidemia
- Hyper fibrinogenemia
- Alcohol
- Coagulation pathies
- Contraceptive pill

Hematological :-

- Polycythemia
- Thrombocytopenia
- TTP
- SCD
- Paroxysmal nocturnal hemoglobinuria
- Lupus anticoagulant
- Protein C def.
- Protein S def.

Cardiac :-

- RHD (mitr)
- Ajib
- Prosthetic heart valves
- MI, MYP, atrial aneurysm
- Cardiomyopathy
- Bact. endocarditis

Unusual causes :-

- 1) Marfan
- 2) Marantic endocarditis
- 3) meningovascular syphilis
- 4) moya moyas.
- 5) MELAS
- 6) AIDS
- 7) Ehler Danlos
- 8) Fibromuscular dysplasia

Young Stroke Causes :-

I) Infants & Children :-

- Congenital HD
- Arterio venous malformation

II) Children & young :

- a) CVS: RHD, IE, Embolism, prosthetic valve, MVP
 - b) Specific arteritis :- TB, syphilis, nonspecific, moya moyas, takayasu, bouveria, drys.
 - c) Collagen vasculards :- SLE, Anti phospholipid syndrome
 - d) Inborn errors: Homocystinuria, Fabry angiokeratomis
 - e) Hematological :- SCD, ITP
 - f) Thrombophilia: protein C, S def.
- Familial dyslipidemia
Renal DS: FCKD
CADASIL & CARASIL

Investigations :-

- I) Baseline :
- 1) full blood count, ESR
 - 2) Serology for syphilis
 - 3) Blood glucose & urea
 - 4) S. electrolytes, proteins
 - 5) Xray chest
 - 6) ECG & Echo
 - 7) Carotid doppler

II Special Investigations :-

- ① ANA for SLE, RA
- ② Antibodies to dsDNA
- ③ Anticardiolipin AB
- ④ Lupus anticoagulant
- ⑤ S. cholesterol

III. CT scan

MR angiogram

Management

① I) IV thrombolysis -

IV administration of RTP activator (rTPA) or tenecteplase (TNK) within 4.5 hours of the onset of symptoms reduces disability & mortality from ischemic stroke

⇒ Bolus @ rate of 0.9mg/kg (IV) as 10% of total dose as an IV bolus & remainder of dose as a continuous IV infusion over 60 minutes

CI:- Sustained BP > 185/110 mmHg despite Rx
Platelet < 1,00,000/μL
Hematocrit < 25%

* Tenecteplase 0.25mg/kg upto 25mg as IV bolus single dose

- ① Endovascular mechanical thrombectomy
- ② Antiplatelet therapy

Platelet Inhibition :- Aspirin 150mg + Clopidogrel 75mg daily

④ Medical support:

- Prevention of common complications.
- Injections - prophylactic antibiotics
- CVT - compression stockings, streptokinase
- Catheterization, nyle's tube,

• Maintenance

of blood pressure :-

Treat if BP > 220/120 mmHg

BP goals in the first 24-48 hrs poststroke :-

No IV tPA : < 220/120 mmHg

IV tPA : < 185/110 mmHg

- first line agents :- labetalol, nicardipine