STROKE CARE IN THROMBOLYTIC ERA
Stroke

- **Ischemic**: 87%
- **Hemorrhagic**: 13%

Warning sign of Stroke?
If this Patient having stroke?

- Goal of Treatment?
- What you will do first?
“Time is Brain”
Facial droop
Arm drift
Abnormal Speech
+ Time

sensitivity = 94%,
specificity = 83%

EMS Action

- Support ABC
- Identify sign
- Establish time
- Transport
- Alert hospital
- Check Glucose
- Notify hospital: Stroke team
Hospital : Stroke center

- Acute stroke team
  - Emergency Physicians
  - Neuro Med
  - Neuro Surg
  - Rehab.
  - Co-ordinator nurse

- Imaging
- Stroke unit
- Protocol
- CQI

Immediate General Assessment and Stabilization

- ABCD
- Neurologic Screening : NIH
- ECG 12 leads
- Activate Stroke Team
- Brain CT
  - Obtain : 25 min
  - Interpretation : 45 min
- Admin of thrombolytics : 60 min (Door - Needle)
Indication:

- Diagnosis of ischemic stroke causing measurable neurologic deficit
- Onset of symptoms < 3 hours before beginning treatment
- Age $\geq$ 18 years
Contraindication: in 3 hr

- Head trauma or prior stroke in previous 3 months
- Symptoms suggest subarachnoid hemorrhage
- Arterial puncture at noncompressible site in previous 7 days
- History of previous intracranial hemorrhage
- Elevated blood pressure (systolic > 185 mmHg or diastolic > 110 mmHg)
- Evidence of active bleeding on examination
- Acute bleeding diathesis, including but not limited to
  - Platelet count < 100,000/mm³
  - Heparin received within 48 hours, resulting in aPTT > upper limit of normal
  - Current use of anticoagulant with INR > 1.7 or PT > 15 seconds
- Blood glucose concentration < 50 mg/dL (2.7 mmol/L)
- CT demonstrates multilobar infarction (hypodensity > 1/3 cerebral hemisphere)
Relative contraindication

- Only minor or rapidly improving stroke symptoms (clearing spontaneously)
- Seizure at onset with postictal residual neurologic impairments
- Major surgery or serious trauma within previous 14 days
- Recent gastrointestinal or urinary tract hemorrhage (within previous 21 days)
- Recent acute myocardial infarction (within previous 3 months)
Additional Exclusion: 3 to 4.5 hr

- Age >80 years
- Severe stroke (NIHSS >25)
- Taking an oral anticoagulant regardless of INR
- History of both diabetes and prior ischemic stroke
Hypertension

- >220/120
  - 15 % in 24 hr
- Thrombolytics >185/110
  - < 180/105
  - Until 24hr after thrombolytics

Guidelines for the early management of adults with ischemic stroke ; Stroke. 2007 May;38(5):1655-711
General Stroke Care

- Glucose control < 185mg%
- $T < 37.5\, ^\circ C$
- Seizure prophylaxis is not recommended

What you will DO?

- If you suspected patient with stroke symptoms in your ER-OPD/ward?
  - ABC
  - Stroke: Thrombolytics? : FAST TRACT?
    - F.A.S : SIGN of stroke?:
    - T : TIME? < golden periods (4.5 hr)
    - Rule out symptoms of disease mimics stroke: Hypoglycemia, post ictal, syncope?
  - Activated stroke Fasttract

Rural ER
- Consult doctor!
- Refer to center
How to transfer

- อาการเข้าได้?
- ประสาน ER เตรียมส่งต่อก่อนเข้า?
- ข้อมูลที่ต้องเตรียม:
  - ผู้ป่วย อาชีพ
  - โรคประจำตัวที่ได้
  - ประวัติโรคสมองที่ได้
  - DTX
  - Blood pressure
  - Glasgow coma and Brief Neuro sign
  - Stroke fast track alert check list
Thank you

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