



Thrombolytic therapy should be the first line treatment in acute ishchemic stroke

We are against it!!



85% of strokes are ischaemic, and related to blockage of an artery by a blood clot, so potential treatments to improve the circulation might be:

- ***Thrombolytic (clot-dissolving)***: eg Streptokinase, TPA. Breaks up clot by splitting fibrin
- ***Anticoagulant (Clot preventing)***: prevents formation of fibrin, prevents spreading of clot & formation of new clot
- ***Antiplatelet (clot preventing)***: prevents platelets sticking together prevents spreading of clot & formation of new clot.



Thrombolytic therapy

TO BE
OR NOT
TO BE



Streptokinase

Multicenter Acute Stroke Trial — Europe (MAST-E)

- Treatment with streptokinase resulted in an increase in mortality

IV t-PA

Lets check the feasibility

Inclusion Criteria for IV tPA

1. Age 18 years or older
2. Clinical diagnosis of ischemic stroke with a measurable neurological deficit
 - Clinical symptoms are not always obvious
 - 14% will be misdiagnosed as other conditions
 - CT scan doesn't improve diagnosis significantly



- Among 821 consecutive patients admitted to an acute stroke unit, the initial diagnosis of stroke proved incorrect in 108 (13%)
- The frequency (but not the type) of incorrect diagnosis was the same in 244 patients investigated with CT scanning as in 345 patients investigated without it

MacLachlan Stroke Unit, Sunnybrook Medical Centre, and University of Toronto, Canada
University Hospital, University of Western Ontario, London, Ontario, Canada
The Lancet, [Volume 319, Issue 8267](#), Pages 328 - 331

Time of onset

<180 minutes

Is That Possible
man????



Why Not??

- Wake-up stroke- 20%
- Clinical findings are not always clear cut
- Patients perception
- Social constrains
- Damn Jammed Traffic !!!

Stroke Chain of Survival

Detection	Recognition of stroke signs and symptoms
Dispatch	Call 9-1-1 and priority EMS dispatch
Delivery	Prompt transport and prehospital notification to hospital
Door	Immediate ED triage
Data	ED evaluation, prompt laboratory studies, and CT imaging
Decision	Diagnosis and decision about appropriate therapy
Drug	Administration of appropriate drugs or other interventions



Search Maps



Directions



Driving

From **Unknown road**

To **Shahbagh Foot Over Bridge, Dhaka 1217**

Via Outer Circular Rd

4.2 km **14 min**

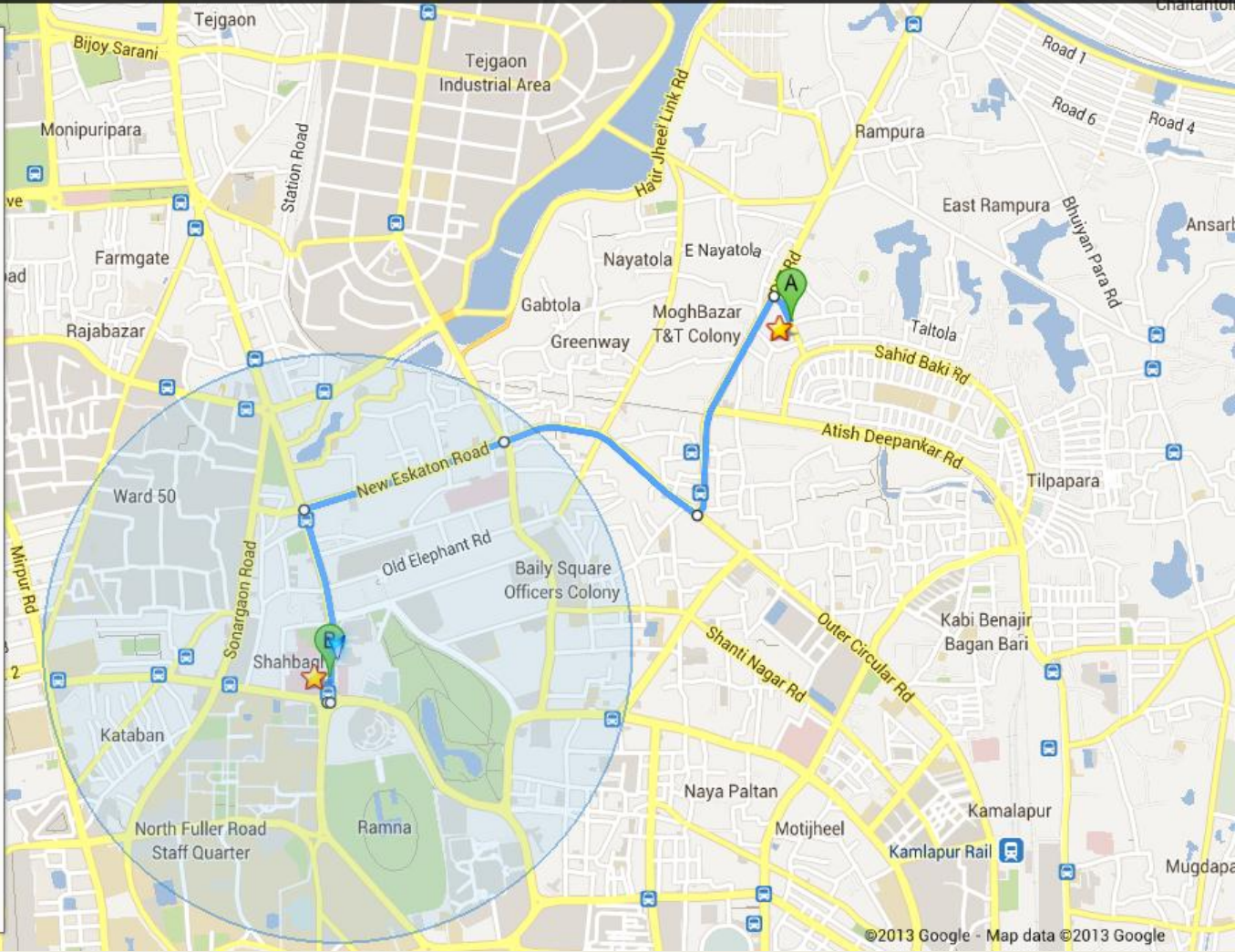
Head northwest toward Shahid Muktijoddha Faruk Iqbal and Taslim Rd
150 m

Take the 1st left onto Shahid Muktijoddha Faruk Iqbal and Taslim Rd
1.1 km

Turn right onto Outer Circular Rd
1.0 km

Continue onto New Eskaton Road
950 m

Turn left onto Kazi Nazrul Islam Ave
900 m



Best possible timing

- Detection (uncertain) = 30 min
- No-911 No EMS
- communication with others= 1 hour
- Renting a vehicle= 30 min
- Transportation time= 45 min
- ED evaluation= 30 min
- No urgent lab/ No urgent CT
- CT outside BSMMU= 2-3 hour
- Evaluation by neurologist= 15 min
- Patients counseling= 15 min
- Arrangement for medication= 15 min

Best possible total time= 6-7 hours

Exclusion Criteria

- Evidence of intracranial hemorrhage
- Clinical suspicion of subarachnoid hemorrhage even with normal CT 5%
- CT shows multilobar infarction (hypodensity greater than 1/3 cerebral hemisphere)
- History of intracranial hemorrhage/stroke
- Uncontrolled HTN: At time treatment begins SBP remains >185mm Hg or DBP remains >110mm Hg despite repeated measurements



- Known arteriovenous malformation, neoplasm, or aneurysm
- Witnessed seizure at stroke onset
- Acute bleeding tendencies
- Platelet count $<100,000/\text{mm}^3$
- Heparin received in prior 48 hours with elevated PTT
- Current use of an anticoagulant (Coumadin/Warfarin)
- Within prior 3 months: intracranial or spinal surgery, head trauma, or previous stroke
- Arterial puncture at noncompressible site within last 7 days
- Woman of child bearing age who has a positive pregnancy test

Relative Contraindications/Precautions:

- NIH stroke scale >22 (severe deficit) or <4 and no dysphasia (mild deficit) or rapidly improving
- Symptoms (spontaneous clearing)
- 14 days post operative or post trauma
- Recent GI or urinary tract hemorrhage (prior 21 days)
- Recent AMI (prior 3 months)
- Postmyocardial infarction pericarditis
- Glucose <50 mg/dl OR >400 mg/dl
- Age >80
- History of ischemic stroke AND diabetes

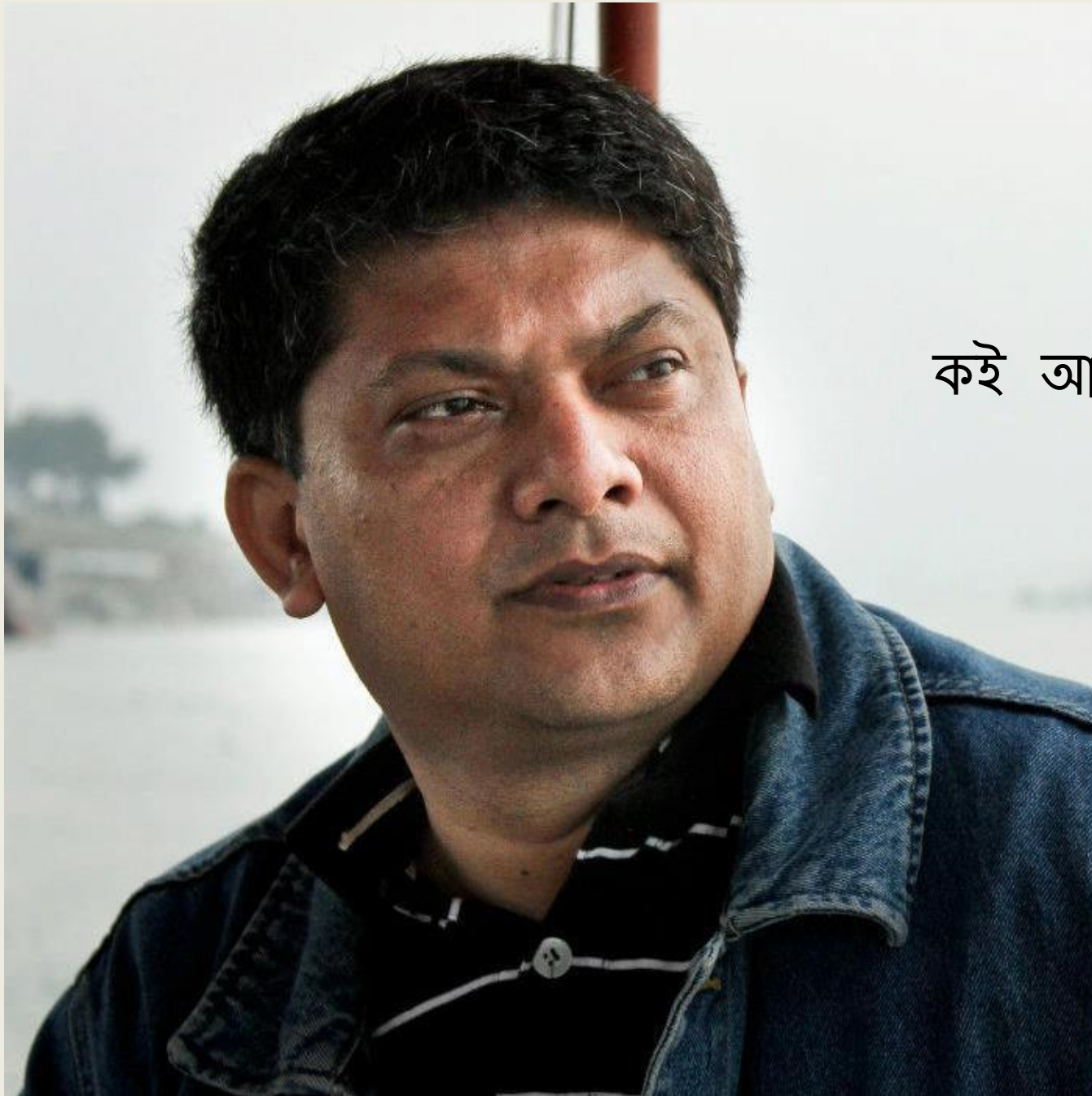
Persons receiving t-PA

Only
<5%



What does a lucky patient gets

- No center for giving t-PA
- The price is 70-80,000 tk



কই আইলাম !!!

