

Results of Intravenous Thrombolysis in Turkey: A Multicenter Study

Turkish Thrombolytic Therapy Study Group

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World Stroke Congress
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Background

The approval of iv rt-PA use in Turkey:

Within 3 hours : 2006

Within 4.5 hours: 2012

Aims

Facilities of centers implementing the therapy?

Profile and outcome of the patients?

Safety and efficacy of the treatment?

Methods

Conducted by: Thrombolytic Therapy Study Group

Supported by: Turkish Neurological Society

Coordinator Center: University of Dokuz Eylül

Registration of the Patients: June 2011 – April 2012

Collection of data: www.inmetromboliz.com

Therapeutic window, stroke severity,
imaging modalities, complication rates.

Results

Centers	38
Cities	18
Patients	974
Male	574 (59%)
Female	400 (41%)
Age	65 (IR, 56-73)
Age (81-88)	34 (3.4%)

Patients: 974



Izmir: 3 Centers
Istanbul: 13 Centers
Ankara: 7 Centers

NIHSS at admission

Median	15 (IR, 11-18)
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Therapeutic window

Median (Interquartile Range)

Onset- to-door	75 (IR, 45-120) minutes
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Door- to-needle	60 (IR, 40-85) minutes
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Onset- to needle	150 (IR, 120-180) minutes
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>3 Hours: 161 patients (16.5%)

Median: 220 (IR, 200-240) minutes

Brain Imaging

CT	768	80%
MRI	81	8%
CT and MRI	117	12%

Vascular Imaging

CTA	137	14%
MRA	199	21%
CTA and MRA	7	7%

42%

Application of rtPA

Emergency Service	498	53%
Intensive Care Unit	41	4%
Stroke Unit	18	2%
Neurology Ward	17	2%
Neurointensive Care Unit	356	38%
Other	6	1%

Follow up of the Patients

Intensive Care Unit	49	5%
Stroke Unit	164	17%
Neurology Ward	105	11%
Neurointensive Care Unit	636	67%

Stroke Subtype

Large Artery Atherosclerosis	246	27%
Cardioembolism	401	45%
Small Vessel Occlusion	99	11%
Other causes	28	3%
Undefined	123	14%

Outcome

Discharge	766	81%
Translation	25	3%
Death	148	16%

Intracranial Hemorrhage

Symptomatic and Fatal	43	4,41%
Symptomatic	22	2,25%
Fatal	21	2,15%

NIHSS

Median (Interquertile Range)

Admission 15 (IR, 11-18)

Day 1 9 (IR, 5-15)

Day 7 6 (IR, 2-3)

Day 90 3 (IR, 1-7)

n= 607 (62%)

Conclusions

Iv thrombolysis is safe and feasible.

Thrombolysis is increasing but still not satisfactory in Turkey.

These results encourage the implementation of only available treatment of acute ischemic stroke.

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