

P < 0.001). For each 1.0° Celsius increase in body temperature on day 2, infarct size became three times as large.

**Conclusions:** In patients with ischemic stroke, higher body temperatures during the first three days, though not on admission, are associated with larger infarct size and poor functional outcome. Preventing fever in the first three days could improve outcomes.

**WSC-0572**

**Acute Stroke Management**

**Metabolic therapy for ischemic stroke**

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**Introduction:** The problem of stroke in Ukraine is extremely acute. The frequency of stroke is 2.9–3.0 cases per 1000 population per year. Therefore, studying the therapeutical aspects of ischemic stroke (IS) is very important.

**Aim:** Aspects of metabolic treatment of IS studying.

**Methods:** Were examined 500 patients with acute IS. Were used clinical-neurological, instrumental, biochemical methods. All data were statistically proceeded.

**Results:** Particular attention was paid to the various parts of biochemical abnormalities. Obtained data shown, that drug therapy should be directed to the correction of neurometabolic, neurotransmitter, neurotrophic and other reactions, that lead to degenerative and destructive changes in neurons and the formation of neurological dysfunction. The basic aspects of the pathogenetic cascade are development of the oxidative stress, which leads to the formation of free radicals; neurotoxic effect, especially regarding to the mitochondrial respiratory chain enzymes; changing in the activity of ribosomes and protein synthesis disorders. This significantly reduces the adaptive- compensatory potential of neurons and increase the neuro-metabolic disorders with a worsening of the ‘phenomenon of excitotoxicity’. Thus, for therapy IS is necessary to use complex metabolic preparations.

**Conclusions:** The most important task of metabolic therapy is the maximum possible limit polypharmacy. It is based on drugs, a major challenge is to implement an integrated neuroprotection aimed primarily

at optimizing the energy of neurons in combination with pharmacological protection of mitochondria (Gliyaton (Citicoline), Vazopro (Meldonium), Lira (Choline alfoscerate)).

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**Acute Stroke Management**

**Time distribution in acute stroke work up based on a trauma team structure: The Copenhagen model**

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**Introduction:** Minimizing in-hospital delays in acute stroke treatment remains highly important. Numerous studies have evaluated and approved their door-to-needle time, but few report in detail about the time distribution.

**Aim:** To determine the distribution of time used on all subtasks in acute stroke evaluation in the Copenhagen stroke model.

**Methods:** A median door-to-needle time of 20 minutes has been achieved in our institution by an organizational intervention based on reorganization of patient admission and a stroke team working by trauma team principles. The team includes a neurologist, a radiologist, a stroke nurse, a radiographer and a hospital porter, working in parallel to reduce delays. During a 3-month registration period an external operator registered the time spent on all acute stroke evaluation covering each profession and the time used on all individual tasks.

**Results:** A total of 148 patients and 25 subtasks were registered. In the Figure the 10 most time consuming subtasks are presented. IV line is the most time consuming task, with a median time at 4 minutes and 52 seconds, most likely because only patients the EMS could not provide with an IV line need this procedure after arrival.

**Conclusion:** These results demonstrate that short duration of tasks involved in thrombolysis favors a team structure enabling working in parallel.

**Thrombolysis subtask time consumption**

