

## Selective approach to non-steroidal anti-inflammatory drugs in the prevention of cardiovascular diseases in type 2 diabetes mellitus

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Meta-analysis of randomized trials showed the effectiveness of aspirin in diabetic patients for primary prevention of cardiovascular diseases (CVD). However, long-term using of aspirin can increase the risk of gastrointestinal bleeding and hemorrhagic stroke. We suggested that high activity of specific prostaglandin synthesizing cells (sPGSC) could lead to inflammation and insulin resistance in type 2 diabetes and could become target cells for prevention of CVD. In a retrospective cohort study included 95 patients with type 2 diabetes with high activity of PGSC (29 men, mean age 53, BMI 32 kg/m<sup>2</sup>). All patients were divided into 2 groups by a simple random sampling method: group 1 included 45 patients, who received hypoglycemic agents (including insulin) and NSAIDs (indomethacin, diclofenac at a therapeutic dose, regularly, 3-4 times a year), group 2 included 50 patients without NSAIDs in the treatment. Groups were similar in gender, age, dose of insulin, incidence of arterial hypertension. The main duration of follow-up was 8 years. We have investigated the incidence of fatal and nonfatal strokes and myocardial infarctions. Myocardial infarction and stroke did not develop during the period of observation in the first group, while in the second group, myocardial infarction occurred in 6 patients and ischemic stroke in 5 patients ( $p < 0.05$ ).

**Conclusion:** The intermittent use of non-steroidal anti-inflammatory drugs (non aspirin, non coxibs) in the patients with high activity of prostaglandin synthesizing cells can be used for prevention of stroke and myocardial infarction in type 2 diabetes mellitus.

### Biography

Nailya S. Asfandiyarova has completed her Ph.D at the age of 25 years from Tadjic State Medical University and postdoctoral studies from Tartu State University. She is the lecturer of Ryazan State Medical University. She has published more than 32 papers in reputed journals and serving as an editorial board member of repute.

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