**ASPIRIN RESISTANCE IN WELL CONTROLLED TYPE II DIABETES MELLITUS**

**S. Khosropanah**, A. Shadmehr

Shiraz University of Medical Sciences, Shiraz, Iran

Objective: To evaluate the effect of different doses of aspirin on platelet aggregation in type II DM.

Background: there are more than 150 million new cases of type II DM each year. Coronary heart disease (CHD) is a major cause of death in type II DM. Aspirin is recommended as primary prevention in diabetic patients. On the other hand, uncontrolled DM increases aspirin resistance. Proper dosing of aspirin in well controlled type Ii DM is not known.

Method: 100 well controlled type II DM patients (Hb A1c less than 7) with normal platelet count were enrolled in the study. The study subjects were given 80 mg aspirin per day for 28 days and then 325 mg aspirin for another 28 days. Blood samples were taken during the last day of each period and evaluated for aspirin resistance using platelet impedence aggregometer. Aspirin resistance was defined as platelet aggregation 10-27 Ohms for 1 microg/ml collagen and 5-7 Ohms for 0.5 mg/ml arachidonic acid.

Results: The prevalence of aspirin resistance was 38% with 80 mg daily aspirin and 18% in 325 mg aspirin (p 0.000). 50% of those who were resistant to aspirin at low dose (80 mg) responded well to high dose (325mg) aspirin.

Conclusion: Low dose aspirin is associated with high rate of resistance even in well controlled type II DM patients. Higher doses of aspirin or dual antiplatelet therapy might be a better option in type II DM.