

European Stroke 2020: Male gender and smoking are associated with higher platelet reactivity in stroke/TIA.

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Excessive activation and platelet aggregation plays an important role in the etiopathogenesis of cerebral ischemia. The aim of the study was to assess the relationship between platelet reactivity, gender and vascular risk factors and to evaluate high risk groups of inefficient aspirin treatment in cerebral ischemia patients. The study involved 101 patients, including 69 patients with ischemic stroke and 32 patients with transient ischemic attack. The assessment of platelet reactivity was made within 24 hours of the disease onset using 2 aggregometric methods: impedance and optical. There were no differences in platelet reactivity and ASA resistance between the groups of patients with stroke and TIA in both methods. In the whole group of patients ($p=0.04$) and in the group of patients with stroke ($p=0.0143$), higher reactivity of platelets was observed by impedance aggregometry in men than in women. In the whole group ($p=0.0229$) and in the subgroup with stroke ($p=0.0123$), it was shown that aspirin resistance is significantly more common in the subgroup of men than in women. In smoking patients significantly higher platelet reactivity was found in whole group ($p=0.004$) and stroke patients ($p=0.0135$). Male gender and smoking are associated with greater reactivity of platelets and more frequent occurrence of acetylsalicylic acid resistance in patients with cerebral ischemia. Dual antiplatelet therapy or clopidogrel treatment should be considered in smoking males with cerebral ischemia due to the high risk of aspirin inefficiency. Excessive activation and platelet aggregation plays an important role in the etiopathogenesis of cerebral ischemia. The aim of the study was to assess the relationship between platelet reactivity, gender and vascular risk factors and to evaluate high risk groups of inefficient aspirin treatment in cerebral ischemia patients. The study involved 101 patients, including 69 patients with ischemic stroke and 32 patients with transient ischemic attack. The assessment of platelet reactivity was made within 24 hours of the disease onset using 2 aggregometric methods: impedance and optical. There were no differences in platelet reactivity and ASA resistance between the groups of patients with stroke and TIA in both methods. In the whole group of patients ($p=0.04$) and in the group of patients with stroke ($p=0.0143$), higher reactivity of platelets was observed

by impedance aggregometry in men than in women. In the whole group ($p=0.0229$) and in the subgroup with stroke ($p=0.0123$), it was shown that aspirin resistance is significantly more common in the subgroup of men than in women. In smoking patients significantly higher platelet reactivity was found in whole group ($p=0.004$) and stroke patients ($p=0.0135$). Male gender and smoking are associated with greater reactivity of platelets and more frequent occurrence of acetylsalicylic acid resistance in patients with cerebral ischemia. Dual antiplatelet therapy or clopidogrel treatment should be considered in smoking males with cerebral ischemia due to the high risk of aspirin inefficiency