INTRODUCTION: There has been controversy about the aetiology and pathophysiology of subarachnoid haemorrhage (SAH) related vasospasm. Several pathogenic factors like endothelin and adhesion molecules have been discussed. A recently published study concerning an exclusively Asian population suggested a relationship between SAH related vasospasm and the blood platelet count. The aim of our study was to examine this relationship in a European population. METHOD: We carefully reviewed 88 patients with aneurysmal SAH (54 females, 34 males; mean age 52.5 years, range from 22 to 78 years) treated in our centre with regard to the occurrence of vasospasm and the blood platelet count in a ten day interval after initial SAH. Symptomatic vasospasm was defined as a focal neurological deficit or deterioration in the level of consciousness with or without confirmation of infarction on a CT scan. Thirty-seven patients (42%) developed clinically relevant vasospasm. RESULTS: There was no statistically significant correlation between the blood platelet count chart (maximum and minimum values) and vasospasm or clinical outcome; we also found no gender or age-related influence on the above mentioned relationships. CONCLUSIONS: In our opinion there appears to be a difference between Caucasian and Asian populations regarding the
influence of platelets in the pathophysiology of SAH and vasospasm.