Coagulation profile in Polycythemia Vera and Essential Thrombocytemia Patients in Medan Indonesia

Background.

Polycythemia Vera (PV) and Essential Thrombocythemia (ET), are a group of conditions closely related to hematologic malignancies with main clinical features of overproduction of mature, functional blood cells and a long clinical course. The cardinal features of these disorders are an increased red-cell mass in PV, a high platelet count in ET, with the propensity to hemorrhage, thrombosis and risk of leukemic transformation in the long term. Thrombosis remain the most important complication in Polycythemia Vera (PV) and Essential Thrombocytemia (ET) patients that significantly affect prognosis and Quality of Life.

Aims.
To study the coagulation profile of the PV and ET patients

Methods of Study
This is a descriptive study to investigate the coagulation profile in 35 PV and ET patients. The Coagulation profile include the β thromboglobulin, TAT-Complex, vWF, Fibrinogen, D-dimer.

Results.
33 out of 35 (94%) patients have the history of thrombosis and have been treated with antiplatelet and chemotherapy. 10 patients (28.5%) got the thrombosis. Thromboglobulin increased in all cases (100%), TAT Complex increased in 22 cases (63%), vWF increased in 7 cases (20%), Fibrinogen increased increased in 10 cases (28.5%), D-dimer in 10 cases (28.5%).
BTG elevated >50iu/ml, TAT elevated >2u/ml, vWF elevated >1.5iu/ml, Fibrinogen elevated >4g/l, D-dimer elevated >400 ng/ml