Thromboembolism in patient with immune thrombocytopenia

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Immune thrombocytopenia (ITP) comprises a heterogeneous group of disorders characterized by autoimmunemediated platelet destruction and impairment of platelet production. Autoimmune-mediated accelerated platelet destruction with subsequent clearance in the reticulo-endothelial (RE) system can be reduced by RE phagocytosis-preventing agents, such as intravenous immunoglobulin (IVIG), intravenous anti-D or corticosteroids or may be permanently resolved by splenectomy. Thrombopoietin receptor (TPO-R) agonists, Romiplostim and Eltrombopag, stimulate and increase platelet production. Rituximab, a chimeric monoclonal antibody against the CD20 antigen is used in refractory ITP patients and acts through B cell depletion. In ITP patients, increased risk of comorbidities such as diabetes, renal failure and vascular events has been reported. Thromboembolism is also a potential comorbidity that may require special attention as both management of thromboembolism and thromboprophylaxis in patients with low platelet levels can be challenging. We present a case report of 42 years old women hospitalized because of autoimmune thrombocytopenia, her past history complaints were cough, fever and petechia in lower extremity. The laboratory data shows platelet count as 59,000/mm³ antibody antithrombocyte (+) and other data within normal limit. She was given methylprednisolone 2 mg/kgBW/day, folic acid and roborantia. Good improvement was observed with platelet count 67,000/mm³ by using methylprednisolone and folic acid oral and she was discharged on 4th day after admission. One month later she came as outpatient and complained swelling and pain on her left leg. Laboratory data shows platelet count 54000/mm³ and D dimer>500, USG Doppler: Thrombus totally obstruction in iliac vein, femoralis communis vein, femoralis superficialis vein sinistra, partial thrombus in popliteal vein and tibialis posterior vein. There was normal flow in the artery in both legs. Then she was given low molecular heparin (LMWH) for 5 days and continued with warfarin orally. Thromboembolism (TEEs) have been reported in up to 8% of ITP patients. ITP patients are at increased risk for TEEs compared with the general population. In addition, ITP treatment and the presence of anti-phospholipid syndrome (aPL) might be associated with a greater risk of TEEs. Anticoagulation therapy of TEEs in patients with ITP should be considered based on platelet counts and bleeding status. In the care and treatment of ITP patients, it is important to understand risk of thromboembolism. Treatment should be always personalized to the individual to minimize bleeding and risk of thromboembolism.

Biography

Erwanto Budi Winulyo is currently working as a Chairman in training and research installation at Hospital Marzoeki Mahdi, Bogor, Indonesia. He is currently working in many organizations like Indonesian Medical Doctor Association, Bogor, World Allergy Organization and Indonesian Allergy Clinical Immunology Association. He is a member of many peer reviewed journals and has many publications in National and International journals.

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