THROMBOPHILIC THROMBOCYTOPATHIES – STICKY PLATELET SYNDROM

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Abstract:

Thrombocytopathy is refered to as an abnormality or disease of the platelets. It is usually characterized by decreased platelet function often associated with their decreased count. Defects leading to platelet hypefunction and increased tendency to thrombosis are also known. They appear in many pathological conditions and situations such as hypertension, smoking, diabetes mellitus, hyperlipidaemia, renal failure or chronic inflammatory and oncological diseases. Platelet activation is usually secondary in these states. Less known are the inherited thrombophilic thrombocytopaties. Sticky platelet syndrome is a hereditary, autosomal dominant thrombophilia characterized by platelet hyperaggregation after low concentrations of platelet inducers- epinephrine (EPI) and/or adenosine diphosphate (ADP). Clinically, patients may present with angina pectoris, acute myocardial infarction, transient cerebral ischemic attacks, stroke, retinal thrombosis, early pregnancy loss syndrome, peripheral arterial thrombosis and venous thrombosis, sometimes recurrent even under oral anticoagulant therapy. According to our recent observations, the platelets in SPS are not only hyperaggregable after the induction with low concentration of EPI and/or ADP, but also activated at resting state, as the expression of platelet activation markers CD62P, CD63 and CD51 is higher in SPS patients than in healthy controls.

Although some platelet glycoprotein polymorphisms may be implicated in the SPS, the very nature of the these defects remains still to be discovered.

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Key words: Thrombocytopathy, Platelet hyperfunction, Sticky platelet syndrome