HIGH FREQUENCY OF ENDOTHELIAL COLONY FORMING CELLS MARKS A NON-ACTIVE MYELOPROLIFERATIVE NEOPLASM WITH HIGH RISK OF SPLENCNIC VEIN THROMBOSIS


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SUMMARY:

A high number of progenitors of endothelial cells was recently found in the peripheral blood of patients with chronic myeloproliferative neoplasms. In this paper, the group of Pavia coordinated by Professor Barosi evaluated the clinical significance of this particular type of cells in patients with different forms of Ph-negative chronic myeloproliferative neoplasms. Researchers have demonstrated that a large number of these cells is significantly correlated with characteristics of the disease called "non-active", ie with values of white blood cells, hemoglobin and platelets normal or below normal ranges, and a history of splanchnic veins thrombosis. The high number of circulating endothelial precursors appears to be dependent on myeloproliferative disease; in fact, this was not found in patients with splanchnic veins thrombosis due to other causes. Patients with a higher number of circulating endothelial precursors were found to be female and young; this observation agrees with other papers that reported as a peculiar form of myeloproliferative disease one characterized by white blood cell, hemoglobin and platelets within normal ranges or only slightly altered, associated with splanchnic veins thrombosis, which affects mainly women. The assessment of the number of circulating endothelial precursors could therefore be a useful marker to identify this particular category of chronic myeloproliferative neoplasms, which may often be difficult to diagnose.

To view the paper: http://www.ncbi.nlm.nih.gov/pubmed/21151606