VASCULAR DISEASE, VASCULITIS

LIVEDOID VASCULOPATHY IN KOREANS: CLINICAL FEATURES AND ASSOCIATED PROCOAGULANT CONDITIONS

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Introduction: Livedoid vasculopathy (LV) is a rare, chronic, painful, ulcerative condition of the lower extremities. Several procoagulable conditions such as methylene tetrahydrofolate reductase (MTHFR; C677T) mutation and hyperhomocysteinemia are thought to be associated with LV.

Objective: To assess clinical features and procoagulable conditions of LV in Korean adults

Materials and Methods: Total of 40 patients with LV were retrospectively analyzed. Control group included 47 patients with psoriasis or eczema to compare MTHFR mutation and plasma homocysteine levels with LV patients.

Results: The median onset age of LV was 33 years (range, 12-65) and women-to-men ratio was 2.3:1. The median time from onset to diagnosis was 5 years (range, 0.2-40). LV was exacerbated in summer in 89%. Previous history of venous insufficiency and polycythemia vera was reported in 3 and 1 patient, respectively. In 26 patients who were screened, 57.5% (23/26) presented laboratory abnormalities of procoagulant conditions: MTHFR mutation (TT genotype, 36.8%, CT genotype, 47.4%), and increased concentration of homocysteine (10.5%) and lipoprotein(a) (25%). Other detected laboratory abnormalities included antinuclear antibody (19.2%), hepatitis C serology (14.3%), and rheumatoid factor (11.5%). Homocysteine level was significantly higher in MTHFR TT genotype than in CC genotype (10.8 vs. 7.3 μmol/L, p=.040) but was not statistically different between LV patients and controls (9.3 vs. 8.6 μmol/L, p =.704). Women had higher odds ratio of LV (OR, 6.7; 95% CI 1.6-28.2) compared with men, and TT genotype showed increased odds ratio of LV (OR, 11.0; 95% CI 1.6-75.3) compared with CC genotype.

Conclusions: LV in Korean patients showed a female predominance and significant delay of diagnosis. More than half of LV had procoagulant laboratory abnormalities, of which MTHFR mutation was the most frequent. TT genotype of MTHFR C667T showed a significant higher risk of LV compared to CC genotype.