

治療抵抗性重症虚血肢患者に対する 自家骨髄単核球細胞移植による血管再生治療

Therapeutic Angiogenesis using bone marrow-derived mononuclear cells in patients with no-option chronic limb-threatening ischemia

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ABSTRACT

Critical limb-threatening ischemia (CLTI) has poor outcomes with highly limb amputation rate, which leads to a significant reduction of quality of life. Revascularization by bypass surgery or endovascular therapy is recommended as the conventional treatment in patients with CLTI. However, there are many CLTI cases in which revascularization is difficult due to vascular characteristics and patency rate after revascularization is also insufficient, especially those caused by thromboangitis obliterans (TAO) or collagen disease-associated vasculitis (CDV). Therapeutic angiogenesis using bone marrow-derived mononuclear cells (BM-MNCs) implantation was clinically introduced as advanced medical treatment, and many trials demonstrated its long-term efficacy and safety in patients with CLTI. Especially, in patients with CLTI caused by TAO or CDV, this cell therapy has better clinical outcomes compared with the conventional treatment. In conclusions, BM-MNCs implantation is expected to be an effective and feasible treatment for patients with CLTI.

KEY WORDS therapeutic angiogenesis/bone marrow-derived mononuclear cells/
chronic limb-threatening ischemia (CLTI) /peripheral arterial disease/
no-option

はじめに

末梢動脈疾患 (peripheral arterial disease ; PAD) は、動脈内腔が狭窄し慢性的に四肢への血流が減少す

ることで、冷感やしびれ、間欠性跛行を自覚する疾患であり、重症化すると安静時疼痛や組織欠損に至る。いずれの段階でも生活の質 (quality of life ; QOL) の低下は避けられないが、特に組織欠損や感染が続発す