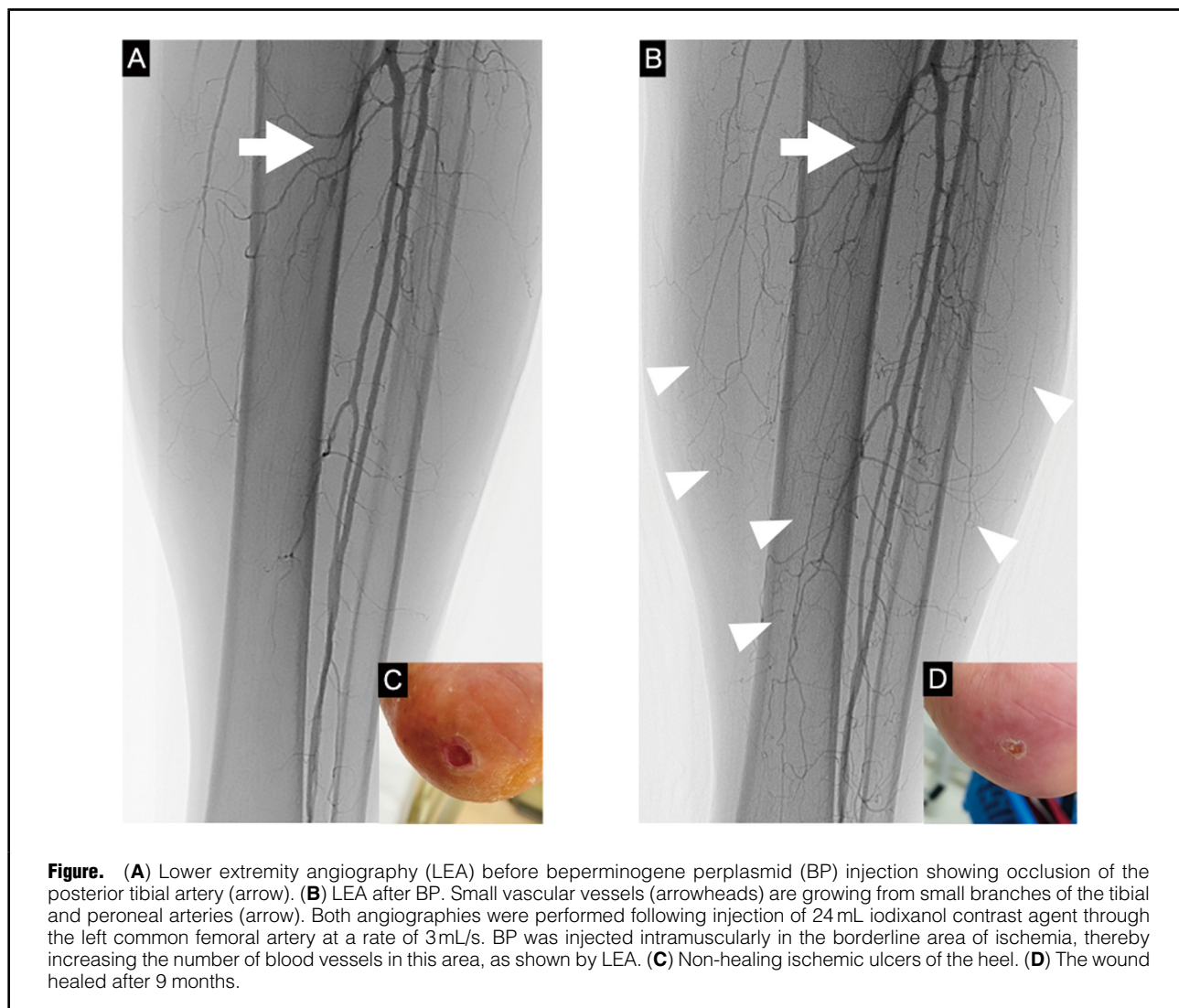


Angiographic Change After Injection of Bepermingene Perplasmid, a Hepatocyte Growth Factor Gene Therapy Product for the Treatment of Critical Limb Ischemia

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Received November 29, 2021; accepted November 29, 2021; J-STAGE Advance Publication released online December 16, 2021 Time for primary review: 1 day

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ISSN-2434-0790



Beperminogene perplasmid (BP) is a hepatocyte growth factor gene therapy product that has angiogenic activity.¹ There are no reports on angiographic changes after BP injection in patients with critical limb ischemia (CLI). Here, we report on angiographic changes after treatment of CLI with BP.

A 62-year-old woman who, for the previous 2 years, had had atherosclerotic non-healing ischemic ulcers on the left heel that were not responsive to endovascular treatment was started on BP injections. BP injections were administered 3 times every 4 weeks. In each session, BP was injected at 8 sites (0.5 mg per site) in the left soleus muscle under ultrasound guidance. Lower extremity angiography (**Figure A,B; Supplementary Movie**) showed neovascularization. The wound healed (**Figure C,D**), and left plantar skin perfusion pressure improved from 20 to 53 mmHg. There were no other changes in medical treatment related to wound healing or off-loading devices. This is the first observation of an angiographic change associated with BP injection in a patient with CLI.

Disclosure

The authors report no financial relationships or conflicts of interest regarding the contents of this manuscript.

IRB Information

This manuscript was approved by Kyoto Daiichi Red Cross Hospital Ethics Committee (Reference no. 1368).

Reference

1. Suda H, Murakami A, Kaga T, Tomioli H, Morishita R. Beperminogene perplasmid for the treatment of critical limb ischemia. *Expert Rev Cardiovasc Ther* 2014; **12**: 1145–1156.

Supplementary Files

Supplementary Movie. Lower extremity angiography (LEA) before and after beperminogene perplasmid (BP) injection, showing wound blush around the left heel after BP injection.

Please find supplementary file(s);
<http://dx.doi.org/10.1253/circrep.CR-21-0148>