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**Direct Hemoperfusion Treatment Using an Adsorptive Column, Rheocarna,
During Conventional Hemodialysis Therapy Is Effective for Chronic Limb
Threatening Ischemia (CLTI)**

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Case Study : 【BACKGROUND】 Recently, adsorption therapy using Rheocarna™ system has become available for hemodialysis (HD) patients with chronic limb threatening ischemia (CLTI), however, HD patients has to spend extra 2 hours before an HD session or to go to the hospital on a date other than dialysis days to receive Rheocarna™ treatment, consequently time and physical burden falls on HD patients, which keeps HD patients away from Rheocarna™ treatment.

【OBJECTIVE】 We report how to treat CLTI from the first Rheocarna™ treatment during usual 4-hour-HD sessions on only HD days. 【SUBJECTS】 The patients in Case 1 and Case 2 are 76- and 82-year-old males with a 14-year and 3-year HD history, respectively. Both patients have diabetes kidney disease and Fontaine's grade IV arteriosclerosis obliterans in the lower extremities, which resists conservative treatment with drugs or vascular surgical treatment. 【METHODS】 Rheocarna™ which adsorbs apolipoprotein B-100 and fibrinogen particles was placed in series just before a usual hollow-fiber dialyzer. Using nafamostat mesylate, Rheocarna™ was first flushed alone, and then Rheocarna™ and a dialyzer were primed, followed by a conventional HD session. Two hours after the start of this treatment Rheocarna™ was removed from the circuit and for the next 2 hours, usual HD therapy was performed. 【RESULTS】 No coagulation was observed in Rheocarna™, the dialyzer, or the blood circuit, and blood pressure in both patients did not decrease to a level that interfered with HD therapy. 【DISCUSSION】 Rheocarna™ treatment during conventional HD sessions did not put a time or a physical burden on the HD patients. 【CONCLUSION】 The patient's quality of life can be maintained by treating CLTI from the first Rheocarna™ treatment during a usual 4-hour-HD session on only HD days.