

Treatment of Critical Limb Ischemia at Fukuoka University Hospital : Importance of Interdepartment Cooperation

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Abstract : Background : Cases of critical limb ischemia have increased due to the growing number of patients with diabetes and renal failure. Treatment of critical limb ischemia may require revascularization and limb amputation, and continuous wound management is needed regardless of surgical treatment. Here we discuss several such cases in which our department performed surgical treatment in cooperation with the Department of Plastic Surgery. Subjects : The subjects were 5 patients (4 males, 1 female) who were hospitalized for critical limb ischemia during the period from April to December 2008. The therapeutic policy for these patients was discussed with the Department of Plastic Surgery. The average age was 69.2 years old. Four of the patients had diabetes, 5 had hypertension, 2 had dyslipidemia, 3 had ischemic heart disease, and 3 were receiving dialysis. The severity of all of the diseases was determined to be Fontaine Classification . Results : Two patients underwent limb amputation due to uncontrolled infection, but the limbs of 2 other patients were saved by revascularization. One patient required revascularization and amputation of one limb. The 3 patients who received revascularization underwent femoral artery–posterior tibial artery bypass surgery, popliteal artery–posterior tibial artery bypass surgery + amputation of a toe, and axillary–bilateral ambilateral femoral artery bypass surgery + one–side below knee amputation, respectively. An autogenous vein graft was used in 2 of the patients. Discussion : We were able to save the limbs of 3 patients by revascularization, but amputation was unavoidable in some patients. Revascularization is essential in treatment of critical limb ischemia, but control of infection and wound management are also important. We believe that the limbs of 3 patients were saved because we discussed the therapeutic policy and performed surgical treatment in cooperation with the Department of Plastic Surgery. Since foot care services at an outpatient department are now available at our hospital, we anticipate that the number of cases of critical limb ischemia will increase in the future. A higher rate of saved limbs and improvement of QOL can be achieved by accumulating data on such cases and performing multimodal therapy.

Key words : Critical limb ischemia, Revascularization, Peripheral arterial disease, Foot Care, limb salvage