GERIATRIC NUTRITIONAL RISK INDEX PREDICTS 2-YEAR MORTALITY IN PATIENTS WITH CRITICAL LIMB ISCHAEMIA FOLLOWING ENDOVASCULAR THERAPY

Poster Contributions
Poster Hall B1
Sunday, March 15, 2015, 3:45 p.m.-4:30 p.m.

Session Title: PAD and Vascular Medicine
Abstract Category: 44. Vascular Medicine: Endovascular Therapy
Presentation Number: 1224-337

Authors: Tatsuya Shiraki, Osamu Iida, Shin Okamoto, Takayuki Ishihara, Kiyonori Nanto, Takashi Kanda, Masashi Fujita, Masaaki Uematsu, Kansai Rosai Hospital, Amagasaki Hyogo, Japan

Background: Emaciation negatively impacts prognosis of patients with critical limb ischemia (CLI). However, whether nutritional status affects prognosis of CLI patients following revascularization therapy has not been systematically explored. We investigated whether the Geriatric Nutritional Risk Index (GNRI) is related to the prognosis of CLI patients after endovascular therapy (EVT).

Methods: Clinical outcomes were retrospectively evaluated in 473 consecutive patients (74±10 years; 59% male) with CLI who underwent EVT. GNRI was assessed on admission. Cox proportional hazard analysis was performed to explore the independent 2-year mortality determinants.

Results: Among baseline ADL characteristics, 48% were non-ambulatory status. Average body weight was 54±11 kg, and body mass index was 21±4. Serum albumin level was 3.4±0.6 g/dL. Average GNRI score was 90±12. GNRI (hazard ratio, 0.96; 95% confidence interval, 0.94-0.98) was chosen as the independent predictor of 2-year mortality after EVT. According to the receiver operating characteristic curve, the cut-off value of GNRI score was 88 (sensitivity, 63%; specificity, 68%). Survival rate at 2 years was higher in the high (≥88) GNRI group than in the low (<88) GNRI group (79.1% versus 52.0%, P < 0.01). Relationship between GNRI for all patients and mortality rate and risks derived from Cox proportional hazard model was shown in Figure.

Conclusion: GNRI on admission is independently associated with 2-year mortality after EVT in CLI patients.