

Ga-67 citrate scan in vascular graft infection

Ignacio BANZO, Remedios QUIRCE, Justo SERRANO, Julio JIMENEZ,
Olga TABUENCA and José M. CARRIL

Servicio de Medicina Nuclear, Hospital Universitario Valdecilla, Santander, Spain

The clinical utility of the Ga-67 scan has been studied in 9 patients with clinical suspicion of vascular graft infection. Eleven grafts were analyzed: 4 aortobifemoral, 2 iliofemoral, 3 femoropopliteal, 1 axillofemoral, and 1 axillobifemoral. The Ga-67 scan was positive in 8 grafts with bacteriological proof of infection and negative in 3 grafts in which infection was ruled out by clinical follow-up. A Ga-67 scan also demonstrated the spread of infection to the thigh in two patients and to the pelvis in another two patients. In 4 patients CT was performed. The CT findings included graft thrombosis, perigraft fluid collection and thickened graft wall. No discrepancies were found between the CT scan and Ga-67 scan. In three patients a control Ga-67 scan was carried out after specific antibiotic and surgical treatment. Two of these showed increased Ga-67 uptake and spreading of infection along the graft; in the other patient, a Ga-67 scan revealed normalization after resolution of an abdominal abscess. In conclusion, the Ga-67 scan proved useful in the diagnosis of vascular graft infection, the definition of location of the extent of the disease and in the evaluation of the efficiency of treatment.

Key words: vascular graft, infection, Ga-67 scan