Neprhon-sparing surgery for the treatment of small renal tumors. the role of radiofrequency Cirugía conservadora de riñón para tumores renales pequeños, papel de la radiofrecuencia

Velasco, Alfredo Castillo, Octavio Vidal, Ivar Sánchez-Salas, Rafael Campos, Rodrigo Cabello, Renato Balbontin, Felipe Majerson, Alejandro

González, Gilberto

OBJECTIVES: Laparoscopically assisted radiofrequency is a minimally invasive nephron-sparing treatment option for renal tumors, mainly in patients with high comorbidity. We present the short-term results of our series patients treated with this novel technique. METHODS: Renal lesions smaller than 4 cm, suspicious of malignancy or metastasis on CT scan or MRI are candidates for radiofrequency. Under laparoscopic vision the tumor is identified, and percutaneous biopsy is performed. Depending on the size of the tumor, a number of punctures with the radiofrequency needle are performed with the aim to achieve tumor necrosis during at least one cycle of radiofrequency. Follow-up is performed with MRI in the first postoperative day and then after CT scan or MRI at 1, 3, 6 and 12 months. The persistent absence of contrast or vascular necrosis of the lesion is considered a satisfactory ablation without recurrence. RESULTS: 12 patients, two with metastasis and ten with primary lesions (mean age