

学位論文の要旨

所 属	乙 三重大学医学部（放射線医学）	氏 名	高 木 治 行
論文の題名			
Renal Cell Carcinoma: Radiofrequency Ablation with a Multiple-Electrode Switching System—A Phase II Clinical Study			
主論文の要旨			
<p>Purpose: To prospectively evaluate the safety and effectiveness of radiofrequency ablation with a multiple-electrode switching system for the treatment of renal cell carcinoma (RCC).</p> <p>Materials and methods: Thirty-three patients with histologically proved RCCs were enrolled. The mean maximum tumor diameter was 2.9 cm. Radiofrequency ablation was conducted with a multiple-electrode switching system. The primary endpoint was evaluated with the Common Terminology Criteria for Adverse Events. Secondary endpoints were changes in renal function, technique effectiveness, local tumor progression, and survival.</p> <p>Results: No severe adverse events occurred, but three of 33 patients (9%) had grade-2 adverse events. Although the mean glomerular filtration rate at 1 year after radiofrequency ablation was similar to the baseline value in 26 patients with bilateral kidneys ($P = .14$), it was decreased significantly in six patients with a single kidney ($P = .03$). Tumor enhancement disappeared after a single session in 31 patients and after two sessions in the other two patients. No local tumor progression was found during the mean follow-up of 20.0 months (range, 11.6–27.6 months). The respective 1-year overall and RCC-related survival rates were 97% and 100%.</p> <p>Conclusion: Radiofrequency ablation with a multiple-electrode switching system is safe and effective for treatment of RCCs.</p>			