

RADIOFREQUENCY ABLATION (RFA) OF PRIMARY AND METASTATIC LUNG TUMORS: SINGLE CENTRE-SINGLE DEVICE EXPERIENCE

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Purpose: To assess feasibility and results of RFA in the treatment of primary and secondary lung tumors.

Materials and Methods: In the last 3 years we selected 22 patients (mean age 66.8 years) with 26 pulmonary lesions: 12 primitive and 14 metastases. The procedures were performed with CT guide with anesthesiological assistance using a coaxial Le Vein needle-electrode. The results were evaluated by post-procedural CT and after 1, 3, 6 and 12 months from the treatment and then every 6 months.

Results: We obtained a complete ablation of 22/26 lesions (84.6%). We observe 7 pneumothorax (4 spontaneously resolved and 3 drained through coaxial needle), 4 middle pleural reactions, 1 hemothorax drained surgically. During follow-up we observe a stability of 2/4 lesions that received partial ablation and a disease progression in 2/4. 22 tumors, that received a complete ablation, have mean follow-up of 12.2 months (range 6-36): in 3/22 lesions we observed a recurrence (2/3 received a further RFA); in 19/22 complete ablation was confirmed by CT. A systemic disease progression occurred in 7/22 patients.

Conclusions: RFA is a valid option of treatment in “not surgical” patients with primary and secondary lung tumors, with good results in the local tumor control.