Extending indication for Radiofrequency Ablation (RFA) in cancer surgery

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Abstract

Radiofrequency ablation (RFA) represents one of the successful methods for the thermal ablation of unresectable tumors. The tumoricidal effect of this method consists in the tissular conversion of electromagnetic energy into thermal energy. The term refers to the electric current, whose frequencies reach high values, 480 KHz on average. The method involves the insertion of bipolar needles in parenchymal tumors. The thermal tissue damage depends on both the temperature reached and the duration. The most frequent use is for unresectable hepatic tumors (metastases, hepatoma) or for those with a contraindication for surgery, visible on ultrasound. We have also widened the indications to other tumoral locations: cervical cancer (stages II, III, IV) accompanied by metrorrhagia, RFA being used hemostatically and with the purpose of reducing the size of the tumor, genital tumors, lateral-aortic lymph blocks to reduce the tumoral mass, metastases (the psoas muscle, the sacrum), retroperitoneal sarcoma, with a hemostatic role and also to reduce the size of the tumor. The paper aims to present a preliminary situation based on 24 cases. The results have shown the usefulness of the application of RFA with the purpose of reducing the tumoral mass and the hemostatic role of the method. No complications were recorded.

Key words: radiofrequency ablation, hemostasis, cervical tumor, pelvic tumors

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