Chirurgia (Bucur). 2015;110(2): 144-150

The Configuration of Biomolecular Markers in Cancer of the Uterine Cervix. Personalized Therapy. Monitoring and Prognosis

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Abstract

Introduction: The paper deals with the diagnosis of some aggressive forms of uterine cervix cancers, resistant to radio/ chemotherapy, usingbiomolecular markers.For this study, the destruction of tumours in stages II-IIIBis carried out by hyperthermia induced by different sources of energy. The aimed targets aretoembed a quick and simple technique of haemostasis used in bleeding uterine cervix tumours associated with acute anaemiain the treatment protocols and to identifybiomolecular criteria revealing tumour aggressiveness and treatment response.

Method: The proposed method consists in radiofrequency ablation (RFA) applied touterine cervix bleeding tumours with acute secondary anaemia. Studying 16 patients displaying aggressive cancer forms resistant to radio/chemotherapy treated by the abovementioned method, we assessed that the commonly present markers: Ki67, p53 and Bcl-2, may be a substantial indication of such cases. Aggressiveness and treatment resistance was defined based on clinical and paraclinical investigations.

Results: RFA haemostasis achieved in approximately 20 min proved the efficiency of this method. A secondary important effect was local tumour volume decrease, resulting in the improvement of radio-chemotherapy responsiveness.

Conclusions: Once an aggressive and radio-chemotherapy resistant cancer is diagnosed, thequantitative, qualitative and associative presence of the biomolecular markers mentioned hereinbefore, could influence the personalised treatment attitude (radiofrequency, neoadjuvant chemotherapy), which on the long term, may increase patient survival and life quality improvement.

Key words: biomolecular markers Ki67, p53 and Bcl-2, tumour of the uterine cervix, hyperthermia

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