EXPERIENCES WITH COMBINED TELERADIOThERAPY AND SUPERFICIAL HYPERTHERMIA IN PATIENTS WITH HEAD AND NECK CANCERS

Zapletal R.¹, Pála M.¹, Kvěch J.², Kubeš J.¹, Oppl L.*³, Vrba J.*³

¹Institute of Radiation Oncology, Bulovka Hospital, Praha, Czech Republic; ²Department of Radiation Oncology, Motol Hospital, Praha, Czech Republic; ³Czech Technical University, Faculty of Electrical Engineering, Praha, Czech Republic

Background:
The combination of teleradiotherapy and superficial hyperthermia is used in the treatment of patients with Head and Neck Cancers in our department, especially in cases with superficial tumours or lymph node metastases.

Patients and methods:
From 9/2002 till 2/2007 we treated 90 patients by combination of teleradiotherapy and superficial hyperthermia. There were patients treated for the first time with curative intent, patients with relapse after previous radiotherapy as well as patients with primary palliative intent. All of them were clinical stage IV. Linear accelerators with energy 5MeV or 6MeV were used for radiotherapy, with dose per fraction 2-3Gy, 5 fractions a week. For superficial hyperthermia was used Hyperthermia System 4010 from Lund Science AB (Sweden). The hyperthermia was applied after radiotherapy once a week, 60 minutes for one application.

Results:
From the group of 90 patients with combined teleradiotherapy and superficial hyperthermia, 76 of them finished the planned treatment (64 men, 12 women). 62 patients were treated with curative intent, 14 patients were treated with palliative intent. Among these 76 patient were 12 patients with reirradiation (8 patients - curative intent, 4 patients - palliative intent).

Responses:
Curative intent: CR 41 pts. (66,12 %), PR 13 pts. (20,96 %), SD 6 pts. (9,67 %), PD 0 pts. (2 pts. were not evaluated).
Palliative intent: CR 0 pts., PR 10 pts. (71,42 %), SD 2 pts. (14,28 %), PD 2 pts. (14,28 %).
The responses were evaluated 1-2 months after finishing of treatment by clinical or pathological examination and imaging assessment (CT, USG).

Conclusion:
In this group of patients were achieved relatively high rate responses after the treatment. The problem in evaluation is short follow-up period (average 10 months).