

## Improving the quality of life of patients with TCC by sequential chemoradiotherapy

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**Objective.** Radiotherapy with transurethral resection (TUR) combined either with primary polychemotherapy (with MTX, VLB, CDDP+/-ADR (MVC-RT) or concomitant monochemotherapy with VLB (RT + V)) assures a long-term survival and conservation of the bladder in more than half of the patients with invasive transitional cell carcinoma (TCC) of the urinary bladder. If the primary systemic polychemotherapy is successful, the target doses (TD) can be reduced from 62–66 Gy to 50–60 Gy. The purpose of this research was to find out whether the reduction of TD assures better quality of life to the patients.

**Patients and methods.** Of 186 patients with TCC of the bladder treated with chemoradiotherapy in the period from 1988 to 1994, 34 survivors with the conserved bladder were entered into the study. They were all requested to fill in a modified EORTC QLQ -C30 forms regarding their quality of life, to assess their problems according to the enclosed SOMA scale and to have cystometrography performed.

**Results.** We received the filled-in forms of 26 patients. Of these, 14 were treated with sequential chemoradiotherapy (MVC-RT) and received a median TD of 51.7 Gy, whereas the remaining 12 received concomitant chemoradiotherapy (RT+V) and a median TD of 63.6 Gy. Urodynamic examination was performed in 23 patients; of these, 12 were treated with MVC-RT, whereas 11 with RT+V. In view of physical, role, emotional, cognitive and social functions, generally better results were observed in the group with lower TD, though the statistically significant difference was observed only in the role functioning score (93% and 63% at a higher and lower TD, respectively;  $p=0.028$ ). Moreover, considering the symptoms of chronic post-irradiation lesion of the rectum and urinary bladder, a similar observation was made. Patients having received lower TD presented with generally less serious problems, statistically marginal differences were noticed in the miction rate ( $p=0.06$ ), hematuria ( $p=0.119$ ) and the rate of uncontrolled defecations ( $p=0.131$ ). From the cystometrography measurements, a median maximum capacity of the urinary bladder was assessed to be 348 ml (398 and 294 ml, at a lower and higher TD, respectively;  $p=0.05$ ). Reduced compliance of the urinary bladder was observed in 7/23 patients (2/12 patients and 5/11 patients at a lower and higher TD, respectively;  $p=0.193$ ). Hyperactivity measurements did not show any significant differences. The whole group had high treatment tolerance (97.1%: 94.6% MVC-RT and 100% RT+V;  $p=0.0095$ ).

**Conclusion.** A combination of TUR and MVC-RT with histological confirmation of CR by biopsy of tumor bed carried out prior to radiotherapy allows the irradiation with lower TD, thereby decreasing the toxicity of the treatment and assuring a better quality of life to patients.

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