

**PRELIMINARY EUROPEAN
RESULTS OF LOCAL
MICROWAVE HYPERTHERMIA
AND CHEMOTHERAPY
TREATMENT IN
INTERMEDIATE OR HIGH RISK
SUPERFICIAL TRANSITIONAL
CELL CARCINOMA OF THE
BLADDER.**

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Introduction: Superficial bladder cancer can be treated by transurethral resection (TUR) and adjuvant intravesical therapy. Intravesical bacillus Calmette-Gue´rin (BCG) has been proven to be more efficacious with respect to recurrence prevention than intravesical chemotherapy, although at the cost of more severe side effects. There is a need for a new treatment modality with higher efficacy and less toxicity. The subject of this study is the efficacy of local microwave hyperthermia and chemotherapy treatment in intermediate or high risk superficial transitional cell carcinoma (TCC) of the bladder.

Patients and Methods: Ninety eligible patients received adjuvant treatment with a combination of mitomycin-C (MMC) and local microwave hyperthermia. All patients had multiple or recurrent Ta or T1 TCC of the bladder and were classified as intermediate or high risk according to EAU criteria. In total, 41 patients were BCG failures. The treatment regimen included 6 to 8 weekly sessions followed by 4 to 6 monthly sessions. Follow-up consisted of video-cystoscopy and urine cytology every 3 months. All patients were observed for 2 years.

Results: Kaplan-Meier analyses of the total group (N=90) indicated that 1 year after treatment only 14.3% (SE 4.5%) of all patients experienced a recurrence. After 2 years of follow-up the risk of recurrence was 24.6% (SE 5.9%). No progression in stage and grade was observed.

Conclusion: Microwave induced hyperthermia combined with MMC has promising value in intermediate or high risk superficial bladder cancer patients compared to literature data of BCG and/or intravesical chemotherapy, particularly where other treatments, i.e. BCG, have failed.