



First results of sequential instillation therapy using Bacillus-Calmette-Guerin (BCG) and electromotively supported mitomycin application (EMDA) in non-muscle invasive high-risk urothelial carcinoma of the urinary bladder

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Introduction: The therapy scheme with sequential instillation therapy BCG and EMDA-Mitomycin tries to combine the immunological effect of the BCG and the chemotherapeutic effect of the mitomycin. We report the first results of a prospective study.

Material and methods: From January 2018 to March 2020, n = 18 patients were included in the study. In the therapeutic scheme, two intravesical BCG instillations are followed by an EMDA mitomycin instillation at weekly intervals, beginning three to four weeks after the resection, for a duration of 9 weeks. In maintenance therapy, two EMDA mitomycin instillations are followed by a BCG instillation at monthly intervals. The

entire therapy takes a little longer than a year. A cystoscopy with urine cytology is performed every three months. Relapse and progression rates were calculated.

Results: 9 patients had pT1G3 + pTis, 4 patients had pTa G3 as a relapse after chemoradiotherapy or mitomycin instillation therapy and 5 patients had multifocal pTis. The median follow-up was 12 months (range: 5-18). The 12-month relapse-free and progression-free survival was 94%. Only one patient relapsed muscle-invasive urothelial carcinoma (pT2G3) after the end of maintenance therapy and was successfully treated with radical cystectomy.

Conclusion: The first results of sequential instillation therapy with BCG and EMDA-Mitomycin are encouraging and could represent an alternative and customized treatment strategy for patients who are unsuitable for or refuse radical cystectomy. However, long-term data are required.