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Adjuvant Photodynamic Therapy (PDT) with Photosensitizer Photosens for Superficial Bladder Cancer. Experimental investigations to treat prostate cancer by PDT with Photosens.

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Abstract

14 patients with transional-cell bladder cancer in stage T1N0M0G2 after transurethral bladder resection were offered adjuvant treatment with PDT. Adjuvant PDT was performed 1-1.5 months after transurethral bladder resection for superficial bladder cancer. Prior to PDT conventional and fluorescent cystoscopy were performed. In the absence of inflammation and after full epitalisation of postoperative wound a session of therapy was performed. 24 hours prior to PDT-session photosensitizer Photosens was injected intravenously in the dose of 0.8 mg per kg of body weight. Prior to PDT local anesthesia of urethra with lidocain-gel was performed. Cystoscopy was carried out. PDT was performed with diode laser "Biospec" (675 nm). During the session the place of standing diffuser and the volume of a bladder were controlled. After 7 months of observation no tumor recidivists were observed. Registered side effects were not life-threatened. 5 patients had pain or discomfort in suprapubic area, ceasing spontaneously or requiring administration of analgetics. No systemic side-effects or allergic reactions were observed. The method can be used in out-patient practice. Absence of early recidivists shows efficiency of PDT in the treatment of superficial bladder cancer. Further study is necessary to estimate optimal regimen of PDT. The further controlling of condition on the patients in this group is required. At the laboratory animals' experiment, we conducted the explorations devoted to the influence of the photodynamic effect at the prostate's tissues.

Citation
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