Secondary bladder malignancies represent less than 10% of all bladder tumors. Most of these are direct invasion from prostate, cervix, uterus, or gastrointestinal tract. The most common metastatic lesions are malignant melanoma, and carcinomas of stomach, breast, kidney, and lung [Abol-Enein H., Kava B.R., Carmack A.J. Nonurothelial cancer of the bladder. Urology. 2007; 69 (1): 93-104].

With a comprehensive clinical data and aid of ancillary techniques, such as immunocytochemistry (ICC), cytopathologist can detect cancer cells in urine samples with high probability. **Objective.** The purpose of our study was to evaluate the cytology and ICC possibilities in secondary bladder malignancies diagnostics.

**Materials and methods.** 118 samples of voided urine were cytologically evaluated on suspicion of secondary lesion of the urinary bladder. This material was obtained from 71 patients with medical history of: renal cell carcinoma (n=18), cervical cancer (n=12), colon cancer (n=11), multiple primary malignancies (n=9), prostate cancer (n=7), ovarian cancer (n=2), breast cancer (n=2), gastric cancer (n=2), pelvic tumor (n=2), renal angiosarcoma (n=1), uterine leiomyosarcoma (n=1), melanoma of the vagina (n=1), abdominal wall sarcoma (n=1), uterine cancer (n=1), thyroid cancer (n=1). For cytopreparation we used cytocentrifuge Cytospin-3 (Thermo Scientific Shandon, UK). For cytological evaluation we applied the Paris system of reporting urinary cytology criteria. 10 patients underwent ICC.

**Results.** In 11 of 71 patients secondary bladder malignancies were histologically verified. Among these cases we also detected 10 of 11 tumors cytologically, in urine samples: colon cancer (n=4), cervical cancer (n=1), prostate cancer (n=1), ovarian cancer (n=1), gastric cancer (n=1), melanoma of the vagina (n=1), uterine cancer (n=1). All cytological findings were confirmed by relevant ICC reactions. No malignant neoplasms of the bladder were found in remaining 60 patients, neither histologically, nor cytologically.

**Conclusions.** The cytology and ICC combination allows to achieve remarkable results – 91% sensitivity and 100% specificity in secondary urinary bladder malignancies detection.

**The authors declare no conflict of interest.**