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Early detection of urinary bladder tumors with narrow band imaging

*Ivan Vladanov, Alexei Plesacov, Ghenadie Scutelnic, Vitalii Ghicavii

Department of Urology and Surgical Nephrology Nicolae Testemitanu State University of Medicine and Pharmacy, Chisinau, the Republic of Moldova

Authors' ORCID iDs, academic degrees and contributions are available at the end of the article

*Corresponding author: ivan.vladanov@gmail.com Manuscript received August 10, 2020; revised manuscript August 24, 2020; published online October 02, 2020

Abstract

Background: Early diagnosis at the incipient stages of bladder tumors is one of the current issues discussed in modern urology. Although the main method of diagnosis remains cystoscopy, new methods of visualization and detection of bladder tumors have been proposed over the last decade. The purpose of the study was to determine the impact of narrow band imaging (NBI) cystoscopy in the detection of non-muscular invasive bladder tumors in relation to white light (WL) cystoscopy.

Material and methods: 57 patients with bladder tumor pathology were diagnosed within the Urology Clinic of *Nicolae Testemitanu* State University of Medicine and Pharmacy during February 2016 – March 2018. All patients underwent white light cystoscopy, followed by narrow band imaging cystoscopy. The obtained data were comparatively analyzed.

Results: Out of the total number of 57 patients diagnosed with bladder tumors, 49 (86%) patients were diagnosed via WL cystoscopy and NBI cystoscopy performed after WL; tumor pathology was also detected in other 8 (14%) patients. The quantitative assessment of tumor lesions revealed 102 lesions, of which 75 (73.5%) were determined through WL and 27 (26.5%) tumor lesions were identified by using the NBI method.

Conclusions: Narrow band imaging cystoscopy determines more favorable results in the early diagnosis of non-muscular invasive bladder tumors compared to white light cystoscopy.

Key words: narrow band imaging cystoscopy.

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