and invasive action, should be engaged only after critical analysis of potential influence of AcD on the presence of hmt. Further studies on this topic would be beneficial for clinicists and health care providers.

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How accurate we really are in predicting final stage of non-invasive TCC of the bladder when performing cystoscopy?

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Introduction and Objectives: Approximately 75–85% of patients with bladder cancer present with disease confined to the mucosa (stage Ta-Cis) or submucosa (stage T1). The distinction, whether the bladder carcinoma is non-muscle invasive (NMIBC) or muscle invasive (MIBC) has a cardinal influence on further treatment. The pathological examination of post-TURBT specimen plays the key role in this context. The management of NMIBC became more complex with regard to initial investigation, treatment strategy, intravesical therapy and follow-up. The ability to estimate the tumor stage and grade accurately would be beneficial for patients. Therefore, there is a need to define, if cystoscopy alone can reliably identify tumor stage and grade. The aim was to assess the accuracy of visual staging (by stage and grade) of bladder cancer during cystoscopy. Thereafter, we evaluated the differences in predictability of more and less experienced urologists and analyzed the most common errors in tumor stage and grade identification.
Material and Methods: The records of 189 NMIBC-TURBT procedures performed in 164 patients (aged 29–99, av. 68) from 2007 to 2009 were collected. In all cases stage (T) and grade (G) were assessed by the treating surgeon and documented in operation protocol. Cystoscopic appearance of the tumor was digitally recorded. All data were blindly reevaluated by another two urologists. All clinical results were compared with final pathological examination. Intraobserver and interobserver variations were also noticed.
Results: Urologist predicted correctly both T and G in 60 out of 189 tumors – accuracy of only 31.7%. The accuracy in different pT and G stages were as follows: TaG1 – 25%, TaG2 – 0%, T1G1 – 6%, T1G2 – 66%. The predictibility of T was higher than G (53% vs.47%). The overdiagnosis (between TCC and T0) was noticed in 10 out of 11 patients. Overstaging and understaging between Ta and T1 were noticed in 63% and 24% of cases, respectively. The predictability differed between more and less experienced urologists and the accuracy was as follows: 50% and 27%, respectively.
Conclusions: Our study revealed the lack of appropriate knowledge in the intraoperative assessment of tumor stage. Nowadays, the ability of an urologist to predict T and G depends on the clinical experience level. Therefore, a professional training process and teaching programme are necessary.

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The evaluation of the angiotensin-converting enzyme gene polymorphism in Ta,T1 and invasive bladder cancer

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Introduction and Objectives: The objectives of this study were to investigate the ACE (Angiotensin-Converting Enzyme Gene) genotype and allels in patients with Ta,T1 and invasive bladder cancer and to evaluate the effect of ACE gene polymorphism on staging (T stage) of bladder cancer.
Material and Methods: ACE genotypes and alleles were determined in 113 patients with histologically confirmed superficially (Ta,T1) and invasive bladder cancer (mean age: 65±11.3 years) and this findings with number of tumor, sex, risk of profession, and smoking history were analysed.
Results: ACE genotypes are distributed in patients with Ta,T1 and invasive tumors as follows; ID is present in 14 (46.7%), DD in 9 (30%), II in 7 (23.3%) patients with Ta tumors, and ID in 19 (42.2%), DD in 16 (35.6%), II in 10 (22.2%) patients with T1 tumors and ID in 15 (39.5%), DD in 15 (39.5%), II in 8 (21.1%) patients with invasive tumors ($p > 0.05$). I allele was found in 28 (46.7%), 39 (43.3%), 31 (40.8%) in Ta,T1 and invasive tumor respectively ($p > 0.05$). D allele was found in 32 (53.3%), 51 (56.7%), 45 (59.2%) in Ta,T1 and invasive tumor respectively ($p > 0.05$). Smoking history, sex, risk of profession, and number of tumor were similar in patients with Ta,T1 and invasive tumor. There were no significant correlation between ACE genotypes and number and size of tumor, sex.
Conclusions: This present study revealed that no significant association between ACE gene polymorphism and staging (T stage) of bladder cancer.

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Optical coherent tomography for surgery and urology using: A systematic review

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Introduction and Objectives: The Optical Coherent Tomography (abbreviated OCT) became a standard diagnostic modality for retinal pathologies nowadays. However, the OCT is exploring for an experimental investigation in surgical branches, especially in urology and basing of this, it is need to clarify any OCT potentials of use. Aim of the study was presenting OCT potentials for imaging in surgery and urology according to literature recourses.
Material and Methods: Medial and Scientific bases were searched using "Biopsy in vivo, OCT, Surgery, Urology" as key words. We used MedLine with PubMed tool. 123 items were retrieved. For analysis we used 21 manuscripts (1 report, 7 abstracts, 12 articles and 1 book).
Results: The principle of OCT consists in lighting by optical radiation of anatomical object under consideration with subsequent light reflection level identifying. It is estimated the spatial resolution of the OCT and the penetration depth as 1–15 μm and up to 4 mm appropriately. The OCT as clinical imaging tool has the sensitivity from 60% to 100%, the specificity from 78% to 100%, the positive prognostic validity from 23% to 98% and the negative prognostic validity from 87% to 100%. The