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Abstracts

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Conclusion: This study highlights the importance of the evaluation of surgical margins and staging (EPE) as influencing factors in the biochemical progression of prostate carcinoma. It also allows the comparison with international series and construction of guidelines for post-RP prognostic evaluation.

PS-17-065

The features of p53 and Ki-67 expression during Gleason's grade increase in prostate cancer

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Background & Objectives: Prostate cancer is the most common malignant tumour of the male reproductive organs. Its course depends on the histological and immunohistochemical characteristics of neoplasias. In view of this, the purpose of study was to investigate the influences of prostate cancer differentiation on peculiarities of Ki-67 and p53 expression.

Methods: The research was conducted on acinar prostate cancer cases which were graded according to Gleason Score. The presence of p53 (SP5–1 µg/ml) and Ki-67 (SP6–0.5 µg/ml) receptors was detected by the immunohistochemistry.

Results: Immunohistochemically in prostate cancer tissues it was revealed different p53 and Ki-67 expressions in tumours. Despite the strong correlation between them, they didn't depend on the Gleason's grade. It should be noted, that significantly higher their expression was found in 5th Gleason's grade comparing with others. Moreover, in 5th grade group there are two kinds of tumour tissue: 1. with over-expression of p53/Ki-67 and significant cellular atypia; 2. with low level of p53/Ki-67 expression and without cellular polymorphism.

Conclusion: The increase of Gleason's grade in prostate cancer tissue is not accompanied by the direct enhance of Ki-67 and p53 expression. The morphological evaluation of cancer tissue should include as Gleason's grade as cellular atypia due to different expression of these proteins for 5th Gleason's grade tumours.

PS-17-066

Low frequency of mismatch repair protein expression in a series of bladder carcinoma

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Background & Objectives: Lynch syndrome (LS) patients develop upper tract urothelial carcinoma (UTUC) in 4-6% of cases and urothelial bladder carcinoma (UBC) in 0-5%. Although it is well documented that 1-3% of all UTUCs are associated with LS, the frequency of LS among UBC cases is not well known. This study assessed the frequency of mismatch repair (MMR) protein expression loss (as a LS screening test) in a large series of cases with muscle-invasive UBC (MI-UBC).

Methods: Review of medical records from 16 Spanish hospitals identified 540 muscle-invasive UBC cases. Sixteen tissue microarrays (TMAs) were built and immunostained for MSH2, MSH6, MLH1 and PMS2. TMAs were built with tumour specimens obtained by either radical cystectomy without prior neoadjuvant therapy (n=404) or diagnostic transurethral resection (TUR) (n=136). TMA negativity for PMS2 and MSH6 staining was confirmed on whole sections. Two expert pathologists (CC, EM) reviewed all slides.

Results: Only one out of 536 evaluable UBC cases showed loss of expression for both MMR proteins. The patient was a 40-year-old man whose LS diagnosis (confirmed by sequencing, with a germline *MSH2* mutation) was known at the time of UBC TUR.

Conclusion: As shown in the literature, frequency of MI-UBC in the context of LS is very low. Our results indicate that implementation of a universal LS testing algorithm to detect such an uncommon occurrence is not necessary in patients with MI-UBC cases. Nevertheless, MMR protein expression analysis is recommended for younger patients or those suffering from a LS-related condition.

PS-17-067

Incidental prostate adenocarcinoma with prostate transurethral resection, 8 years experience

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Background & Objectives: Patients with benign prostatic hyperplasia (BPH) and transurethral resection of the prostate (TURP) are able to detect incidental early stage prostate cancers (PrCa), which can not be detected by clinical examination and / or imaging. In our study, we investigated whether there was a significant difference in the PrCa detection rate, age between tumour detection and non-detection, histopathologic examination of prostate tissue volume and serum PSA levels after TURP for BPH in our study.

Methods: Between 2011 and 2018, 391 patients who underwent TURP due to BPH in our hospital were included in the study.

Results: After histopathological examination, 17 of 391 patients (4.3%) had incidental PrCa. The mean age was 69.5 (26-93) in cases with no tumours and the mean age was 74.5 (54-93) in cases with PrCa. When the tumours were classified according to age groups, two cases between 50-60 years, two between 61-70 years, eight between 71-80 years, 5 cases over 80 years were observed. Preoperative serum PSA levels were measured and mean PSA level was 5.05 ng / mL in 226 of the non-tumour cases. Pre-operative serum PSA levels of 15 cases with tumour were measured and the mean value was 4.46 ng / mL (0.40-28.5).

Conclusion: In our study, incidence of incidental PrCa detection (<5%) in TURP materials for BPH was found to be in parallel with the literature.