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CLINICAL FEATURES AND THERAPEUTIC HINTS IN INCIDENTAL PROSTATE CANCER

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Introduction/Aim: Incidental prostate cancer (iPCa) is found in about 5% patients with lower urinary tract symptoms (LUTS). However, to establish how to manage this pathological condition could be an interesting therapeutic hint to emphasize (1). The aim was to evaluate clinical features in patients with iPCa who underwent surgical or endoscopic treatment. Subsequently, we describe therapeutic strategies implemented in our population. *Materials and Methods:* We retrospectively analyzed 1,002 patients affected by LUTS who underwent surgical or endoscopic treatment between April 2010 and December 2015. When iPCa was found, we collected cTNM stages (T1a or T1b), clinical, pathological and biochemical patients' data, as well as those regarding treatment, overall survival and disease-free survival. We used *t*-test ($p<0.05$) and Fisher's test for statistical analysis. *Results:* In 1,002 patients with LUTS, we performed 227 prostatic adenomectomies and 775 transurethral resections of prostate (TURP). Sixty patients (6%) were found with iPCa of whom 30 were cT1a and in the other 30 cT1b. These two groups, as compared by the characteristics regarding age, prostate volume (determined by transrectal ultrasound), prostate-specific antigen (PSA) density, weight of prostatic adenoma removed and operative time, did not show statistically significant differences. PSA was significantly higher in cT1b patients ($p=0.03$). Four patients were lost at follow-up; in the other 56 patients, the mean time of follow-up was 45 months. In 27 patients, the clinical iPCa stage was T1a; 20 underwent the Watchful Waiting approach and 7 were treated by active surveillance (AS) strategy. Of the 29 patients with cT1b, 15 (51.7%) underwent conservative treatment (Watchful Waiting or AS strategies), 4 patients (13.7%) radical prostatectomy, 6 (20.6%) radiotherapy, 4 (13.7%) androgen deprivation, mainly according to comorbidities and clinical conditions. Biochemical failure occurred in 4 patients (7%), of these 2 belonged to cT1a group and 2 to cT1b. Only one patient died from other causes. *Discussion:* IPCa is still a clinical and pathological condition whose characteristics are not yet fully defined. TNM classification seems to have a role in stratifying patients as for their management (2, 3). This study has confirmed that the value of PSA is the only statistically significant variable, like in the two groups of patients examined. The therapeutic strategies regarding the two groups of patients (cT1a and cT1b) were different: conservative in cT1a group or conservative *vs*. curative in T1b group, depending on the stratification of clinical and pathological characteristics of patients. A longer follow-up could give us more information about "oncological end-points" and, in particular, concerning disease-free survival and overall survival. *Conclusion:* In our experience, Watchful Waiting and AS strategies represent the choice in cT1a iPCa, while cT1b iPCa deserves to be treated or strictly followed-up.

1 Capitanio U: Contemporary management of patients with T1a and T1b prostate cancer. Curr Opin Urol *21(3)*: 252-256, 2011.
2 Jones JS, Follis HW and Johnson JR: Probability of finding T1a and T1b (incidental) prostate cancer during TURP has decreased in the PSA era. Prostate Cancer Prostatic Dis *12(1)*: 57-60, 2009.
3 Melchior S, Hadaschik B, Thüroff S, Thomas C, Gillitzer R and Thüroff J: Outcome of radical prostatectomy for incidental carcinoma of the prostate. BJU Int *103(11)*: 1478-1481, 2009.

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ADIPONECTIN, LEPTIN AND MMP-3 PLASMATIC LEVELS CANNOT IDENTIFY HIGH-RISK PROSTATE CANCER IN PATIENTS UNDERGOING BIOPSY

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Introduction/Aim: To reduce the diagnosis of indolent prostate cancer (PCa) and to prevent progression of aggressive tumors are two important targets in urological oncology. Prostate-specific antigen (PSA) demonstrates low accuracy in the early detection of high risk tumors. There is some evidence in literature that obese patients and/or patients affected by metabolic syndrome (MS) might be at higher risk for biologically aggressive PCa characterized by Gleason patterns 4 or 5. The aim of our study was to investigate the correlation between the body mass index (BMI) class, serum levels of adiponectin, leptin and metalloproteinase 3 (MMP-3) that are biomarkers related to MS and the detection at biopsy of Gleason patterns 4 and 5. *Materials and Methods:* Consecutive patients undergoing prostate biopsy for PSA levels ≥4 ng/ml and/or positive digital rectal examination were included.

Patients were classified in relation to BMI. Blood samples for the evaluation of adiponectin, leptin and MMP-3 were collected. A 12-core transrectal prostate biopsy was performed. Serum adiponectin, leptin and MMP-3 were measured using "Human Leptin Instant ELISA", "Human Adiponectin ELISA", "Human MMP-3 ELISA" kits, respectively. Statistical analysis was performed to relate the plasmatic levels of the above-mentioned biomarkers to the presence of Gleason patterns 4 and 5 at biopsy. *Results:* Fifty-six patients were enrolled. Median serum levels of leptin, adiponectin and MMP-3 were 0.829 ng/ml, 1.72 ng/ml and 1.767 ng/ml, respectively. In relation to BMI class, the plasmatic levels of leptin and MMP-3 were higher in obese (p=0.02) and in normal-weight patients (p=0.02), respectively. No statistically significant difference was detected in serum levels of leptin (p=0.18), adiponectin (p=0.68) and MMP-3 (p=0.49) between the 24 patients (42.8%) with diagnosis of PCa and the 30 patients (53.7%) with a negative biopsy. Comparing the levels of biomarkers in 11/24 patients (45.8%) with Gleason 6 (3+3) and in 13/24 (54.2%) showing Gleason patterns 4 and 5 at biopsy, again, no statistically significant difference in leptin (p=0.4), adiponectin (p=0.6) and MMP-3 (p=0.5) levels was found. *Conclusion:* In our preliminary study, we found increased plasmatic levels of leptin and MMP-3 in obese and normal-weight patients undergoing prostate biopsy, respectively. The significance of this finding, in patients with an elevated PSA, is uncertain. On the other hand, no other statistical difference was found between BMI, plasmatic levels of leptin, adiponectin, MMP-3 and detection of an aggressive Gleason pattern at biopsy.

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BEYOND THE COMPLEXITY OF TUMOR EXCISION DURING PARTIAL NEPHRECTOMY: IDEATION AND HISTOPATHOLOGICAL VALIDATION OF THE SURFACE-INTERMEDIATE-BASE (SIB) MARGIN SCORE

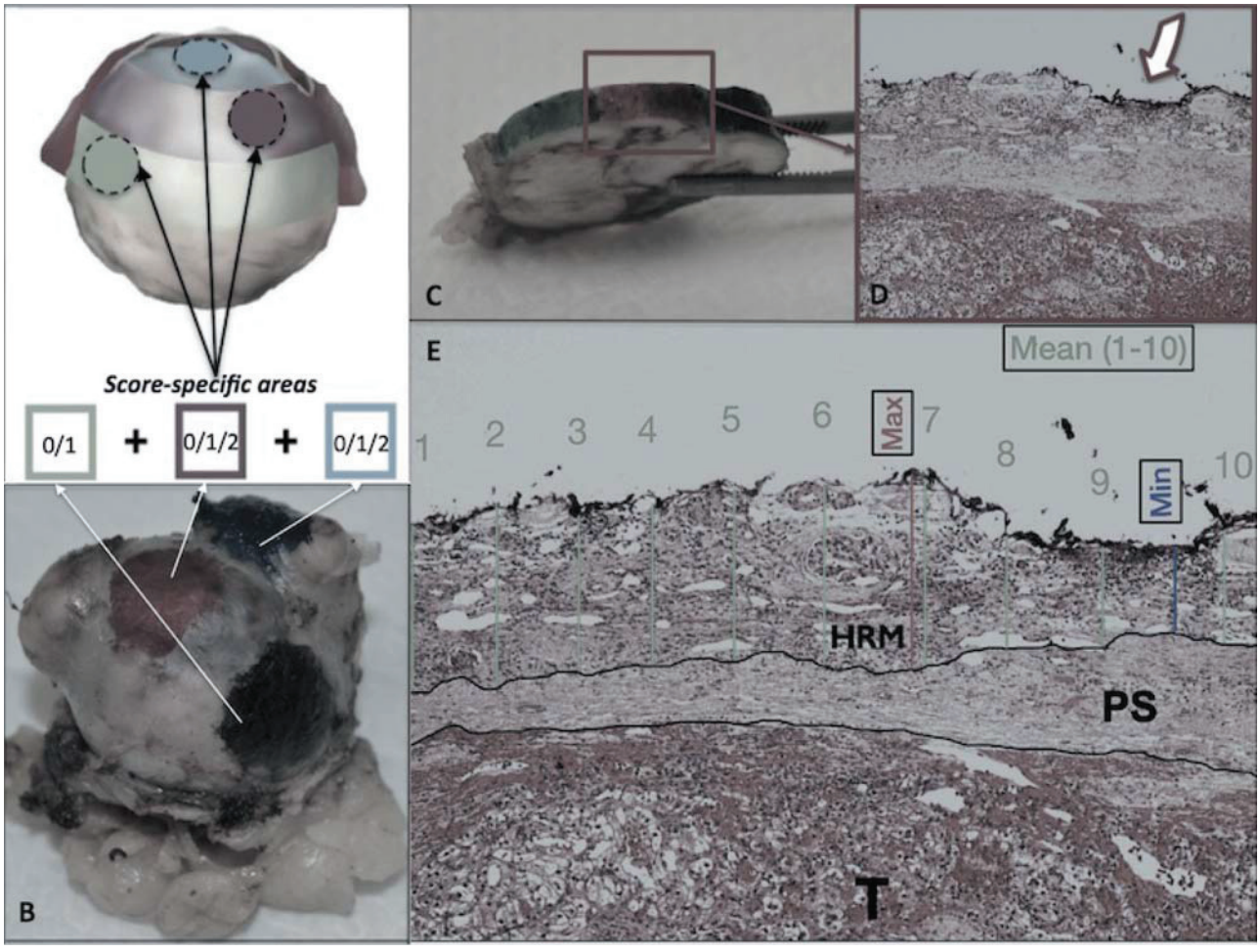

Figure 1. *360 overall histological measures*.