CLINICAL AND PATHOLOGICAL DIFFERENCES RELATED TO GENDER AND SMOKING HABIT IN A COHORT OF PATIENTS WITH BLADDER TRANSITIONAL CELL CARCINOMA.

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OBJECTIVES: The increased incidence of transitional cell carcinoma (TCC) of the bladder in men generally attributed to greater exposure to the carcinogenic effect. Although it has been reported that cancer-specific outcome can be particularly adverse in women due to socioeconomic or biological factors, clinical-pathological differences of TCC at the time of diagnosis have not been sufficiently studied. The aim of this study is to analyze whether there are gender-related differences in grade and tumor stage in primary bladder TCC.

METHODS: From 1990 to 2009, 1196 consecutive patients with primary bladder TCC at our institution were analyzed retrospectively. Patients were characterized by age, smoking, clinical presentation, tumor grade (WHO 1973), tumor size and number, and TNM stage, comparing men and women. Statistical analysis was conducted using the U Mann-Whitney as non-parametric test and Chi-squared test to compare frequencies.

RESULTS: We analyzed 1196 patients (992 males and 204 females) with a 5:1 ratio. We found significant differences in age (68.7 years vs. 73.1 years), smoking (46.5% vs. 11.2%) and muscle-invasive stage (12.1% vs. 18.1%). Correcting by tobacco consumption, never-smokers women have larger and more aggressive tumors with a frequency of muscle-invasive disease three times higher than male never-smokers and equaling to male current smokers.

CONCLUSION: TCC of the bladder is more frequent in males than in females. In this series, women are older at the time of diagnosis and most often affected by muscle-invasive disease particularly in never-smokers. We need studies to analyze the potential impact of passive smoking to justify these results.