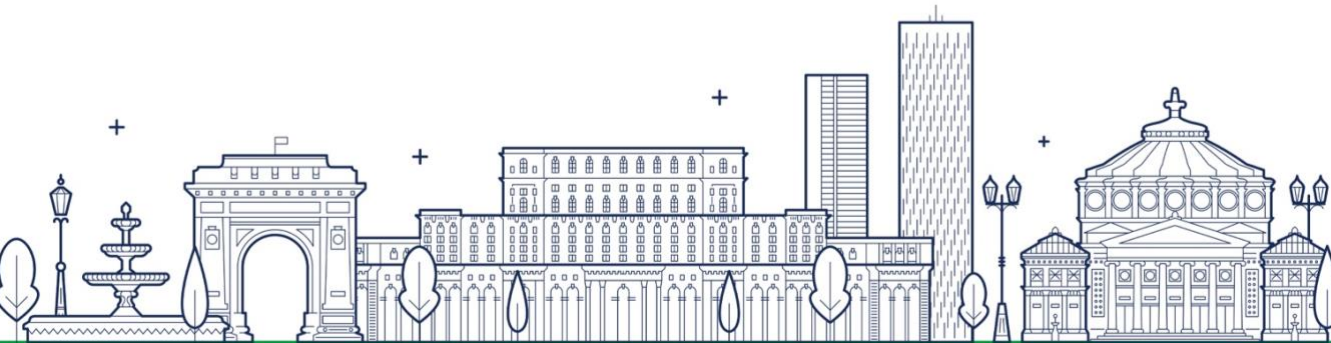


IMSCB

International Medical Students' Congress of Bucharest

Abstracts Book

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The Medical Students' Society of Bucharest

Abstracts Book

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Prostatic Calculi Causes Reduction of Heat Shock Proteins Expression in Prostate Cancer

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Introduction: Heat shock proteins (Hsp) have an important role in tumor cells. Unfortunately, there is no data on the effect of intraluminal inclusions (IIn) on the expression of Hsp in prostate cancer (PCa) cells. The aim of our study was to detect the association between IIn and expression of Hsp in PCa tissue.

Methods: We used 60 PCa samples (30 samples with IIn and 30 samples without IIn) for this study. All samples were examined by hematoxylin-eosin staining and by immunohistochemistry (Hsp70 and Hsp90). All data were analyzed by Shapiro-Wilk test, Mann-Whitney's U-test and Student's t-test.

Results: All IIn were represented by prostatic calculi and corpora amyloacea. We have revealed the significant higher expression of Hsp90 in PCa without IIn ($p < 0.001$) and no significant difference in Hsp70 expression ($p > 0.05$), however with the same trend as for Hsp90. Both Hsp70 and Hsp90 were found in the corpora amyloacea between as a component of protein layers. We also have indicated the higher presence of Hsp90-positive cells in IIn surrounding PCa tissue.

Conclusion: By this study we showed that IIn cause a reduction of Hsp90 presence in PCa tissue. We also indicate Hsp70 and Hsp90 as a components of corpora amyloacea structure which may result in a lower expression of these markers.

Keywords: Heat shock proteins; prostate cancer; prostatic calculi; corpora amyloacea

