

## **THE SUCCESS RATE OF PROSTATE CRYOABLATION RELATED TO THE TRANSPERINEAL PROSTATE MAPPING BIOPSY DATA**

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**Introduction:** The knowledge of the localization and extension of a prostate tumor is crucial for the degree of success in minimally invasive treatments for prostate cancer (PCa). The transperineal prostate mapping biopsy (TPMB) may improve staging and therapeutic decision-making.

**PURPOSE:** To establish the rate of biochemical and biopsy failure after prostate cryotherapy related to the pretreatment biopsy mapping.

**MATERIALS AND METHODS:** From Sept 2008 to Sept 2011, 196 patients with localized PCa underwent cryosurgical radical ablation. The diagnostic was done by TPMB with 20 cores, uniformly distributed on the prostate. The patients were stratified according to the number of positive biopsy cores: less than three - Gr.A(38 patients), 3 to 10 - Gr.B(86 patients), and more than 10 - Gr.C(72 patients). According to D'Amico risk stratification we had 46 low-risk patients, 82 intermediate-risk and 68 high-risk patients. Patients were assessed in regard to biochemical and biopsy failures.

**RESULTS:** Success rate in regard to D'Amico risk groups was 95,65% (44/46) in low-risk patients, 85,36 % (70/82) in intermediate-risk patients and 76,47% (52/68) in high-risk patients. The number of positive biopsy cores highly correlates with the D'Amico risk groups ( $hi^2$  460.616;  $P < 0,001$ ). At a mean follow-up of 24.8 months biochemical failure was absent in those who had one or two positive biopsy cores and higher in those with more than 10 positive biopsy cores (0% Gr.A, 16,27% Gr.B, and 44,44% Gr.C)  $hi^2=172.9234$ ;  $p < 0.001$ .

**CONCLUSIONS:** Prostate-mapping biopsy associated at D'Amico risk classification can predict which patients are at increased risk for disease recurrence after cryoablation.