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FACULTE DES SCIENCES

SIDI-BEL-ABBES

THESE DE DOCTORAT

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Spécialité : Biologie

Option : Biologie de la cellule normale et pathologique, cas des cancers

Intitulé

**Facteurs de risque de développement des tumeurs
prostatiques : Etude épidémiologique et pronostic
par suivi biologique du marqueur PSA (Prostate
Specific Antigen)**

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Abstract

The prostate cancer (Pca) is very common in men older than 50 years. Its frequency in Algeria is growing and its diagnosis is often delayed. In addition to established risk factors, etiology of Pca remains unknown. However, environmental factors are suspected, including food, in the genesis of Pca. The marker, prostate specific antigen (PSA), allows early detection of Pca. The objective of this study is to evaluate the risk factors for Pca based on clinical, biological and histological parameters of Pca. This study was conducted between 2007-2011, on 320 patients enrolled in the University Hospital Urology services of Sidi-Bel-Abbes and Saida hospital, aged 50-80 years and over. Total PSA (TPSA) was measured in the serum of 92 Pca patients and 70 controls on the mini VIDAS analyzer with 4 ng/ml of TPSA as a threshold value. Frequencies and the portions of food consumed, collected by a questionnaire, were analyzed by logistic regression model at 160 histologically confirmed cases and 160 controls. The average age was 71 years. The age-group most affected is 70 – 79 years. The TPSA serum-assay showed an average of 25,1 ng/ml for Pca and 3,38 ng/ml for the controls. Over 78% of Pca patients have PSAT \geq 4 ng / ml which 22.8% are aged 80 and older and 27% were between 20.1 and 50 ng / ml of TPSA. In controls, over 64% had a TPSA $<$ 4 ng / ml. The sensitivity of PSA was 87% while the specificity was 95% from a serum concentration of 6 ng / ml. The dietary survey showed significant positive associations between consumption of animal foods and the risk of Pca while negative associations were observed for consumption of foods rich in ω 3, lycopene and antioxidants. The histological prognosis was unfavorable in 78% of PCa with a Gleason score $>$ 8, while 22% of patients were at a localized stage with 3.1% low risk and a score of 5, followed by 6.2% with intermediate risk whom a score was between 6-7 and 12.5% for high risk with a score of 8. The adherence to diet, the marker PSA and pathology examination, will allow better management of patients.

Key-words: Prostate Cancer, Risk Factors, Food, PSA.