

HUMAN SERUM ADIPONECTIN (ADIPOQ) HAS SIMILAR PRESENCE AMONG DIFFERENT PROSTATE PATHOLOGIES

F.M. Pina^{1,2}, G. Figueiredo³, N. Lunet^{4,5}, F. Botelho^{2,4},
I. Lopes^{1,2}, T. Lopes^{1,2}, F. Cruz^{1,2}, H. Barros^{4,5}

¹Department of Urology, Faculdade de Medicina, Universidade do Porto; ²Department of Urology, ³Department of Immunology, Hospital de São João do Porto; ⁴Department of Hygiene e Epidemiology, Faculdade de Medicina, U. do Porto & ⁵Public Health Institute, Universidade do Porto (ISPUP), Portugal

The adipokine adiponectin (ADIPOQ) presents anti-angiogenic properties, and human prostate tissues have both ADIPOQ receptors: Adipo-R1 and Adipo-R2. The scarce case-control studies have given contradictory results either on the role of ADIPOQ on PCa risk, or among PCa different progression risk groups. We decided to study serum ADIPOQ on candidates to PCa screening.

122 untreated patients (median age 69 years and tPSA 6.7 ng/ml) were screened for PC with 12 core prostate biopsy (transrectal ultrasound). Distribution of pathology diagnosis was: 42 BPH; 41 prostatitis; 39 PC. Blood was collected for haemogram, biochemic, tPSA, cPSA, fPSA, tTestosterone, and monoclonal antibody human ADIPOQ (100% detectable, mean 6641 (865-21424) ng/ml), from Quantikine TM/RD Systems (ELISA). Statistic Analysis: Proportions were compared with Chi2 test; Kruskal-Wallis test was used for quantitative variables.

Significant differences among groups were found for tPSA, cPSA, f/t PSA ratio and f/c PSA ratio. All cases had detectable ADIPOQ, with 60.4% above volunteers commercial test values, and with 7.4% above higher volunteer's values. ADIPOQ presented medians of 9565, 7200 and 8970 ng/ml respectively for BPH, prostatitis and prostate cancer, without statistic significance differences among groups. No significant association was found between ADIPOQ and base-line studied variables; and for prostate cancer patients no association was detected with biopsy Gleason.

In this cohort of PCa screening candidates, circulating antiangiogenic adipokine ADIPOQ though presenting high values in 60% of patients, revealed very large biologic variability among groups with no diagnostic value for prostate cancer.