Metabolic syndrome and low high-density lipoprotein cholesterol are associated with adverse pathological features in patients with prostate cancer treated by radical prostatectomy

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Résumé en anglais	BACKGROUND: Previous studies have suggested a link between metabolic syndrome (MetS) and prostate cancer (PCa). In the present study, we aimed to assess the association between MetS and markers of PCa aggressiveness on radical prostatectomy (RP). METHODS: All patients consecutively treated for PCa by RP in 6 academic institutions between August 2013 and July 2016 were included. MetS was defined as at least 3 of 5 components (obesity, elevated blood pressure, diabetes, low high-density lipoprotein (HDL)-cholesterol, and hypertriglyceridemia). Demographic, biological, and clinical parameters were prospectively collected, including: age, biopsy results, preoperative serum prostate-specific antigen, surgical procedure, and pathological data of RP specimen. Locally advanced disease was defined as a pT-stage ≥3. International Society of Urological Pathology (ISUP) groups were used for pathological grading. Qualitative and quantitative variables were compared using chi-square and Wilcoxon tests; logistic regression analyses assessed the association of MetS and its components with pathological data. Statistical significance was defined as a $P<0.05$. RESULTS: Among 567 men, 249 (44%) had MetS. In a multivariate model including preoperative prostate-specific antigen, biopsy ISUP-score, clinical T-stage, age, and ethnicity: we found that MetS was an independent risk factor for positive margins, and ISUP group ≥4 on the RP specimen (odds ratio [OR] = 1.5; 95% CI: 1.1-2.3; P = 0.035; OR = 2.0; 95% CI: 1.1-4.0; P = 0.044, respectively). In addition, low HDL-cholesterol level was associated with locally advanced PCa (OR = 1.6; 95% CI: 1.1-2.4; P = 0.024). Risks of adverse pathological features increased with the number of MetS components: having ≥ 4 MetS components was significantly associated with higher risk of ISUP group ≥ 4 and higher risk of positive margins (OR = 1.9; 95% CI: 1.1-3.3; P = 0.017; OR = 1.8; 95% CI: 1.1-2.8; P = 0.007, respectively). CONCLUSION: MetS was an independent predictive factor for higher ISUP group and positive margins at RP. Low HDL-cholesterol alone, and having 4 and more MetS components were also associated with higher risk of adverse pathological features.
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[31] http://dx.doi.org/10.1016/j.urolonc.2017.09.026
[32] https://www.sciencedirect.com/science/article/abs/pii/S1078143917305239?via%3Dihub
[33] http://www.ncbi.nlm.nih.gov/pubmed/29153942?dopt=Abstract