Influence of statin use on clinicopathological characteristics of localized prostate cancer and outcomes obtained after radical prostatectomy: a single center study.

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Abstract

INTRODUCTION: To assess the impact of statin use on biochemical recurrence (BCR) of prostate cancer after radical prostatectomy (RP).

MATERIALS AND METHODS: Data from all men treated with robot-assisted laparoscopic RP (RALRP) for localized prostate cancer between 2009 and 2014 at our institution were prospectively collected: age, body mass index (BMI), statin-use status, preoperative prostate-specific antigen (PSA) level, clinical T stage, biopsy Gleason score (bGS), D'Amico risk group, pathological T stage, specimen Gleason score (sGS), multifocality, perineural invasion, positive surgical margins and time to BCR. Univariate and multivariate analysis were performed to test associations between statin use and prognostic factors of prostate cancer and/or BCR.

RESULTS: Overall, 591 patients with a median follow up of 42.3 months [25.8-59.9] were included in the current study and split in two cohorts: statin users (n = 156) and statin non-users (n = 435). When comparing statin user and non-users, no significant difference was found in terms of clinical, biochemical and pathological characteristics except for BMI (median 29 versus 26, respectively; p = 0.04). Regarding BCR, there was no significant difference between men using statin versus those not using them (4.5% versus 4.6%, p = 0.65). In univariate analysis, statin use was not significantly correlated to any prognostic factors of prostate cancer recurrence. Furthermore, there was no significant difference in the 5 years biochemical-free survival rates between statin users and non-users (75% versus 73%; p = 0.7).

CONCLUSIONS: From the current study, statin daily intake was not significantly associated with any prognostic factors of prostate cancer and with BCR after RALRP.

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