Prostate cancer and obesity in Arab countries.

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Letter to the Editor

In western experience; Prostate cancer (PCa) is a major health problem. It is the second most diagnosed cancer; it is ranked as sixth most common fatal malignancy of men [1].

In USA, two-thirds of men classified as overweight and one-third as obese [2].

Obesity is linked to increased risk of death from numerous cancer types including PCa [3-5].

In Arabic and Middle East countries there is no robust epidemiological data of PCa prevalence, however some studies had shown lower rate in comparison to western countries [6].

Low prostate cancer rate among Arab countries could be attributed to genetic factors [7], dietary factors [8] or hormonal androgenic factors [9].

Therefore, we may need to focus on the PCa and Obesity in Middle East and Arab patients.

Another interesting point is obesity and higher Body Mass Index with comparison of PSA (prostate specific antigen), had approved inverse correlation in many studies [10,11].

Indeed, the prevalence of obesity in Arab countries has no published figure. However, with high prevalence due to increased incidence of Diabetic patients, it could miss PCa cases due to their low PSA. Moreover, obesity is considered as risk factor on prostatic biopsies [12].

Measured PSA is demonstrating low level in Arab countries as shown by Kamal et al [13]. Even a recommendation to decrease the diagnostic PSA-cutoff point was suggested to avoid missing positive cases, thus Serum PSA 2 ng/ ml is recommended as a cut-off point to screen and biopsy advice for non symptomatic patients <50 years [14].

With the aura of PSA and BMI inverse relationship, authors tried to find a correlation or equation to predict the actual PSA as sole best screening test up till now.

Kim et al. found that the correlation between PSA and BMI, based on 60 years age stratification, was significant inverse relation in younger patients only and not with the older patients [15]. On other hand, in another study, coincidence finding between PSA and BMI was observed as direct relation in patients less than 50 years of age, whereas PSA is less than 4 ng/ml [16].

Later on, a new suggested equation is suggested to adjust PSA based on BMI and Age [17].

To the date, we still depend on PSA and prostatic biopsies as high sensitivity tools to diagnose PCa, which are need optimization to be applied on Arabic nations.

For instance, some Asian countries are suggesting new PSA adjustments for screening of their population, might be lower than the international figure of PSA [17,18].

As a conclusion, it is robust the need for further studies on Arab countries to emphasize their prevalence of PCa, PSA and obesity correlation. This could be either specific PSA cutoff point, applying certain tumor molecular markers, verification of certain correction equations and/ or define Age/BMI/ PSA stratification for those groups of patient.

Personally, I believe there is still much work is needed in this concern.

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