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Letter to the Editor

Serum PSA levels in Indian population. Is it really different?

Dear Editor

At the outset I would like to offer my compliments to the authors of the original article “Serum PSA Levels in Indian Population: Is It Different” by Agrawal et al. in Medical J Armed forces India 2017;73:112–117.¹ The authors in this present article have delved into relatively unexplored subject as far as Indian subcontinent is concerned and thus added to the Indian database, which was lacking on the subject. They have brought to light the association of rising PSA with age and age wise PSA in Indian population. The subject of the article has been taken and presented well.

Authors concluded that the age wise PSA (mean) in present study was higher as compared to other Indian studies² being a hospital based study but authors have not specified whether these 2124 patients had LUTS or not. Author said that mean PSA is comparable to hospital based study done by Ganpule et al.³ but study done by Ganpule et al. included healthy individuals reported for compressive health check-up. Study by Collin et al.⁴ had shown that LUTS are positively associated with PSA of ≥ 3 ng/ml. The population included in present study had reported to urology OPD and it is possible that mean age wise PSA was higher in present study as patients with LUTS were not excluded.

Authors reported that 294 patients in present study were biopsied due to nodule, abnormal USG finding or high PSA. 156 had negative biopsy out of which 125 had high PSA which were included in 1772 patients finally analysed. It is quite possible that some of these patients may have persistently high PSA requiring 2nd biopsy. Therefore, some of these patients would

have been excluded from the study and mean age wise PSA would have been low as compared to what author has quoted.

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Reply

Dear Editor

We sincerely thank the reader for showing keen interest in our article. We acknowledge the fact that this was a hospital based study and the results would be somewhat different from

that of a community based study. However, we tried to remove this bias by excluding all patients with known prostatic diseases.

Collin et al in their study, as quoted by the esteemed reader, had a totally different conclusion.¹ They wrote and I quote “Our findings show clearly the negative relationship between

LUTS and prostate cancer among men who have raised PSA levels. Raised PSA levels are positively associated with LUTS. Hence, men with raised PSA levels and the presence of LUTS are more likely to be diagnosed with benign disease than prostate cancer". What they mean in their article is that the patients who present with LUTS and have high PSA are more likely to have a benign aetiology. Their conclusion has been misunderstood by our readers who misinterpret it as LUTS causes increase in PSA. Hence the presence of LUTS in itself, when prostate cancer has been ruled out would not increase the PSA level and skew our results.

As rightly brought out by the respondent, in a patient with high PSA, the initial biopsy may at times miss a cancer. The important consideration in this case scenario is to assess the adequacy of the biopsy, taking into account the number of cores taken and the anatomical sites sampled, length of each core and the quality of the tissue sampled. The published literature quotes a figure of upto 30% of such negative biopsies which become positive of repeat biopsy.² However, it must be understood that all patients who had an elevated PSA for which the biopsy was triggered, will not qualify for a repeat biopsy when the first biopsy is reported negative for malignancy. Only those subset of patients who have a continuously elevated PSA or the PSA starts to rise, would be considered for repeat biopsy. This subset of patient would only be a fraction of the initial negative biopsy subset. And out of these only up to 30% of patients would turn out to be actually positive on a repeat biopsy. Hence this small subset of

approximately 10 patients out of 1772 patients who were included in this study would not skew the results to any considerable value.

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