

## Commentary

### Prostate biopsy for elevated prostate specific antigen (PSA) – Indian perspective

Prostate cancer amongst Indian men ranks lower in its recorded incidence compared to other malignancies. However, the mortality rates of Indian men diagnosed with prostate cancer is much more compared to the West<sup>1</sup>. It is clear from the recently published screening trials from Europe<sup>2</sup> and US<sup>3</sup> that while screening increases the detection of cancer, its impact on mortality is less. The Rotterdam arm subgroup analysis has shown that perhaps in long term, the screening has an impact on cancer survival<sup>4</sup>.

However, extrapolation of global data to Indian setting needs to be taken with caution. Indian men diagnosed with cancer are likely to die of the disease and hence there is perhaps a need to identify cancers early enough to treat patients with a curative intent<sup>1</sup>. Screening programme for cancer inevitably increases the diagnosis of early and perhaps indolent cancers (*e.g.* breast cancer). The discriminatory tools to diagnose aggressive and life threatening versus indolent cancers, especially in the prostate are limited. At this moment, level of PSA, Gleason grade of the cancer, radiological and digital rectal examination (DRE) findings are used to perform the above discrimination; all of the above have their limitations.

In general, a serum PSA level of 4 ng/ml is used as a cut-off to recommend for biopsy. Age based PSA helps in avoiding biopsies in older patients. In the article published in this issue<sup>5</sup> the authors have attempted to evaluate the biopsies done for symptomatic men with elevated PSA. They have concluded that elevation of PSA cut-off to 5.4 ng/ml (in patients with normal DRE) could avoid subjecting 10 per cent of men to undergo unnecessary biopsy. However, the mean age

was 65.72 yr which would corroborate with the age related PSA cut-off used commonly. In addition, the study also reiterates the fact that DRE combined with PSA has much high positive predictive value than PSA alone. Hence, it is mandatory for the patients with urinary symptoms to have a digital rectal examination. The long term goal should still remain detection of life threatening cancers in patients at early stage and treat them effectively. At the same time develop ways to reduce unnecessary biopsy in patients. Hence this study adds value in increasing the cut-off threshold for biopsy.

The long term aim, like for other cancers should be primary prevention (yet to be defined for prostate cancer), early detection and effective treatment. For prostate cancer, the best we have is early detection and effective treatment. Hence efforts should be made to create awareness amongst medical professionals as well as public to identify early prostate cancer (at the same time avoid unnecessary biopsies). This would hopefully improve the current high mortality rates associated with this disease.

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