Stockholm3 - A new option to detect Prostate Cancer

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Prostate cancer is the second most often diagnosed cancer and the sixth most prevalent cause of cancer mortality in males globally.\(^1\) It is usually screened by measuring prostate specific antigen (PSA) levels in the blood. However, the PSA test results in unnecessary biopsies, over-diagnosis, over-treatment, and higher expenses.\(^2\) The Karolinska Institute in Stockholm, Sweden, developed the Stockholm3 test to overcome PSA test’s shortcomings.

Stockholm3 is a blood based test that examines PSA, plasma proteins, genetic markers, and clinical data (age, family history, previous biopsies).\(^3\) Eirik Viste et al. studied the outcome of substituting PSA with Stockholm3 for detecting clinically significant prostate cancer (csPC) (Gleason score ≥ 7). The results were significantly in favour of the Stockholm3 test. Data from 4784 subjects showed a 28% reduction in patients referred for further work-up, the percentage of biopsies positive for csPC increased from 42.1% (98/223) to 64.9% (185/285), and a decrease in direct health care costs by approximately 23-28%.\(^4\) A study published in the Lancet Oncology showed that with the help of the Stockholm3 test the amount of biopsies warranted fell by 32% and the number of benign biopsies by 42%.\(^3\) The superior efficiency of the Stockholm3 test showcases its ability to replace PSA in the early detection of prostate cancer in the primary healthcare setting.

Prostate cancer is a commonly diagnosed malignancy in Pakistan. Its prevalence is 6.7 per 100,000 in Pakistan.\(^1\)

Stockholm3 test can prove itself to become a vital tool in any country’s arsenal to combat the deadly prostate cancer, especially in developing and underdeveloped nations. There are no standardized and practical methods to universally screen individuals for prostate cancer in such countries. As a result, men often present late and become victims of poor prognoses. This relatively cheap alternative option can help physicians detect csPC early and improve patients’ outcomes. It can also improve patients’ compliance by decreasing the number of biopsies called for. In summary, Stockholm3 can become an extremely beneficial screening test in treating patients of prostate cancer.

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**References**


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