

Review of literature on significance of free to total PSA ratio in gray zone levels of total PSA by Prakash Shetty & Suvin Shetty was published in Bombay hospital journal.

PSA is an essential part of diagnosis and monitoring of the patient with prostate cancer. The low specificity of PSA in the diagnostic gray zone level between 4 - 10 ng/ml causes diagnostic dilemma resulting in unnecessary biopsies. This study reviewed eleven articles for the accuracy in free-total PSA ratio in this gray zone level of PSA for screening. About 20 to 65% unnecessary biopsies may be avoided when using percent-free PSA cut-off ranging between 14% - 28% while maintaining sensitivity rate from 75 to 95% within the gray zone level. Higher the cut-off, the sensitivity became closer to 100% (>90%) whereas the specificity reduced and vice versa. These data confirm the application of free-total PSA ratio to counsel the patients with gray zone level PSA regarding their risk of prostate cancer and the need for further follow up to rule out malignancy.