

A Case of Positive PSA Test

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Prostate-specific antigen (PSA) is a glycoprotein produced in the tissue of the prostate gland of men; the level of PSA in the blood is extremely low (measured in nanograms per milliliters). Although most healthy men have blood PSA levels not higher than 4.0 ng/mL, the levels may vary over time in the same man. The PSA test was originally approved by the

United States Food and Drug Administration in 1986 to monitor the progression of prostate cancer in men who had already been diagnosed with the disease. In 1994, the FDA approved the use of the PSA test for prostate cancer screening. The author of this short article describes his experience encountering extremely high PSA levels in a perfectly healthy man (Figure 1).



Figure 1 Photograph of Mr. Ch.S. taken on April 6, 2019. Used with permission.

Interesting Events

The subject, Ch.S., was a healthy businessman aged 72 years (Date of Birth: 22-09-1946); he had his annual health check-up at a private hospital (SPH/ HN. 4723756) on October 30, 2015, which revealed a PSA level of 22.50 ng/mL (Ref.Range 0-4 ng/mL). An examination at another private hospital (BRR/ HN. 102510861) on December 3, 2015 showed a PSA level of 20.389 ng/mL, and multiparametric MRI of the prostate gland using endorectal coil showed a mildly enlarged prostate gland suggesting benign prostatic hyperplasia (BPH).

Thereafter, several PSA tests gave results as follows.

On February 27, 2016, a PSA test performed at another private Hospital (NVH/ HN. 1-58-050104) revealed the PSA level to be 19.5 ng/mL.

On June 25 and 26, 2016, PSA tests at NVH were 25 and 25.3 ng/mL respectively.

On August 2, 2016 and October 28, 2016, tests at a university hospital (MH. HN. 53559204) gave readings at the same levels, i.e. 20.33 ng/mL.

On March 17, 2017, a PSA test at another university hospital (RMTH HN 5262273) revealed the level to be 28.520 ng/mL. On March 26, 2017, PSA tested at NVH/HN.1-58-050104 was 25.3 ng/mL.

On December 10, 2017 at a private clinic, the PSA test gave a reading of 36.594 ng/mL.

On February 22, 2019 the PSA test at RMTH (HN. 5262273) revealed a much higher level of 51.420 ng/mL. Despite strong suggestion from the attending physician, the subject adamantly refused to undergo a digital rectal examination.

Discussion

This is a short synopsis of a man whose PSA levels became progressively elevated over a four-year period. He maintained good overall health and is physically fit, apart from developing occasional episodes of mental agitation owing to his works. As the author of this report is not a urologist, an extensive discussion

on high PSA levels and their relationship to prostate health will not be reviewed in depth. The aim of this article is to highlight the importance of monitoring PSA levels in older men regardless of their overall health status.

Of note, although screening test has been shown to reduce a man's chance of dying from prostate cancer, it would mean many men receive treatment unnecessarily from the fact that treating prostate cancer in its early state can be beneficial only in some cases, but the side effects of treatments are potentially so serious that they may choose to delay treatment until it is absolutely necessary.

References

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