Prostate cancer

Prostate cancer is a type of cancer that develops in the prostate gland.

Prostate cancer is one of the most common types of cancer that affect men, especially older men. It typically grows slowly and remains confined to the prostate gland for many years, often without causing significant symptoms or problems. However, in some cases, prostate cancer can be aggressive and spread to other parts of the body, such as bones, lymph nodes, and other organs.

Risk factors for prostate cancer include:

Age: The risk of prostate cancer increases with age, particularly after the age of 50.

Family history: A family history of prostate cancer can increase the risk, especially if a close relative had the disease.

Race and ethnicity: African American men have a higher risk of developing prostate cancer compared to men of other races.

Genetics: Certain inherited gene mutations may increase the risk of prostate cancer.

Diet: A diet high in red meat and high-fat dairy products and low in fruits and vegetables might be associated with a higher risk.

Lifestyle factors: Sedentary lifestyle, obesity, and smoking may also contribute to an increased risk.

Symptoms of prostate cancer might not appear in the early stages, but as cancer progresses, men may experience symptoms such as:

Difficulty in urination

Weak or interrupted urine flow

Frequent urination, especially at night

Blood in the urine or semen

Pain or discomfort in the pelvic area

Erectile dysfunction

Diagnosis usually involves a combination of methods, including a digital rectal exam (DRE) to feel for abnormalities in the prostate, a blood test called prostate-specific antigen (PSA) test to measure the level of a specific protein in the blood, and possibly a biopsy to confirm the presence of cancer cells.

Treatment options for prostate cancer vary depending on the stage of the cancer, the aggressiveness of the disease, the patient's overall health, and their preferences. Treatment options may include:

Active surveillance: Monitoring the cancer closely but not immediately treating it.

Surgery: Removing the prostate gland (prostatectomy).

Radiation therapy: Using high-energy rays to kill cancer cells.

Hormone therapy: Lowering levels of male hormones (androgens) that fuel cancer growth.

Chemotherapy: Using drugs to kill cancer cells or stop their growth.

Targeted therapy: Targeting specific molecules involved in cancer growth.

Immunotherapy: Boosting the body's immune system to fight cancer cells.

Clinical features

Conditions with a similar presentation to NPH

Urinary retention tends to be progressive over time

Prostate cancer is the second most common malignancy to cause death in men, with metastases to the spine being the most common site of metastatic burden.

Leukemia and prostate cancer are the most common systemic cancers associated with subdural hematoma SDH, and gliomas may predispose to SDH more often than previously recognized. Coagulopathy is common and associated with the worst outcome, but many patients experience good functional outcomes and survival [1)].

A multifactorial approach must be conducted including all parameters in order to decide upon the need for prostate biopsy. PSAD proved to be a good marker in favor or against a prostate biopsy with a cut-off of 0.185 ng/ml2, especially in patients with tPSA level higher to 10 ng/ml. A multicenter study was recommended for better and more reliable results and more precise cut-offs [2)].

Prostate cancer intracranial metastases

Prostate cancer may mimic meningioma (prostate Mets to the brain are rare, but the prostate frequently goes to bone, and may go to the skull and can cause hyperostosis).

Prostate cancer intracranial metastases.

Spinal metastases

Prostate cancer spinal metastases.

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Reichman J, Singer S, Navi B, Reiner A, Panageas K, Gutin PH, Deangelis LM. Subdural hematoma in patients with cancer. Neurosurgery. 2012 Jul;71(1):74-9. doi: 10.1227/NEU.0b013e3182517938. PubMed PMID: 22705720.
2)
Msheik A, Mohanna M, Mhanna A, Kanj A, Moussa M, Mohanna A. Predictive value of PSA density in the diagnosis of prostate cancer in lebanese men. Arch Ital Urol Androl. 2022 Mar 28;94(1):18-24. doi: 10.4081/aiua.2022.1.18. PMID: 35352520.