

Prostate cancer: Pathophysiology, Diagnosis, and Prognosis

Abstract

Prostate cancer is more common in the western countries, least common in Asia, and the leading cause of cancer deaths in males worldwide. Individuals who have first-degree family members with prostate cancer have double the risk of getting disease. Risk factors for prostate cancer include family history, genetics, diet, medication, infectious disease and sexual factors. Published animal research studies indicate that basal cells developed cancerous tumors, which appeared identical to human samples. Initially adenocarcinoma a condition known as carcinoma in situ or prostate intraepithelial neoplasia (PIN). Although there is no proof that PIN is a precursor, it is closely associated with cancer. Prostate cancer is associated with urinary dysfunction. Advanced cancer can spread to other parts of the body, i.e. Vertebrae, pelvic, or ribs, also compress the spinal cord, causing tingling leg weakness and urinary and fecal incontinence. Diagnosis by digital rectal examination (DRE), biopsy, Gleason score, and TNM staging (Tumor/nodes/metastasis) and by tumor markers. Management options best depends on the stage of the disease, the Gleason score and PSA level. If radiation fails then surgery may not be feasible, and radiation after surgery failure may have complications, associated with small increase in bladder and colon cancer. Prognostic indicators of disease outcome are stage, pre-therapy PSA level and Gleason score, higher the grade, and the stage poorer the prognosis. Information on the relationship of diet and prostate cancer is poor. American Urological Association (AUA) recommends screening in those of 55 to 69, no more than every two years.