Patterns and presentation of prostate cancer at a referral hospital in the Brong Ahafo region of Ghana: A 10-year retrospective study

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Abstract

Prostate cancer is gradually reaching a very high incidence in Africa, especially in the Sub-Saharan region. Understanding the dynamics in occurrence of the disorder is one approach to developing effective public health programmes and interventions that will help curb the rising incidence. This study was aimed at reducing the paucity of data on prostate cancer by assessing the incidence, patterns and presentation in the Brong Ahafo Region of Ghana. We sought to provide region-specific hardcore data that will help to assess the issue and provide remedies. All prostate disease cases recorded from the year 2009 to 2018 were retrospectively reviewed. Subjects from 40 years and above were eligible for screening. Diagnostic and screening tools for prostate cancer at the study site include family history, serum prostate specific antigen (PSA) test, digital rectal examination, urological ultrasound scan and histopathology (biopsy). Age, PSA values and year of screening/ diagnosis were also retrieved from patient folders reports for the study. Histological findings and parameters considered in the study included diagnosis, carcinoma grading, perineural invasion (PNI) and percentage of affected tissues (%TA). Prostate cancer cases were 369, representing 36.4% of the 1,014 prostate diseases studied. The highest annual prevalence was recorded in 2014 with 51 cases (13.8%). The ages of patients ranged from 46 to 101 years with a modal age range of 70 - 79 years and a mean ± SD of 72.2 ± 9.8. The mean PSA value recorded was 37.07ng/ml (±107.3) with predominance in the 11 - 20.9 ng/ml range. Grade group 2&3 cancers constituted the majority of prostate cancers, accounting for 149 (40.4%) of valid cases. There was a weak correlation (p = 0.091) between grade of prostate cancer and perineural invasion. 38% graded cancer cases had perineural invasion. There is a high incidence of prostate cancer in the Brong Ahafo Region of Ghana 36.4% predominantly advanced prostatic carcinoma. Reported cases also show %TA of 38.7% and 38.0% PNI. Early screening for prostate diseases should be encouraged to avoid progression to malignancy and public health interventions are needed to address some of these issues.

Biography

Alexander Egote holds a specialist degree in Urology and PhD in medicine from Moscow Medical Academy in Russia, a certificate in Clinical Transplantation of Kidney & Liver from SRITAO in Russia, a certificate in Paediatric Urology from SRIU in Russia, a certificate in Fellow Ghana College of Physicians and Surgeons and a certificate in Urodynamics from Enschebe. He is currently the HOD of Urology and Surgical Department and Chairman of Research Board and Committee at Brong Ahafo Regional Hospital, Ghana.

Publications