



Service Priorities and Programmes Electronic Presentations

Convention ID: 1201

Submitting author: Dr Ada NG

Post title: Associate Consultant, Queen Mary Hospital

Pattern of Use of Prostate-specific antigen (PSA) among Different Clinical Specialties: Retrospective Study in a Tertiary Hospital

ATL Ng (1), JHL Tsu (1), SKK Yuen (1), WK Ma (1), BSH Ho (1), TCT Lai (1), CF Tsang (1), CKW Wong (1), EYT Chan (2), MK Yiu (1)

(1)Division of Urology, Department of Surgery, The University of Hong Kong, Queen Mary Hospital, Hong Kong

(2)Division of Clinical Immunology, Department of Pathology and Clinical Biochemistry, Queen Mary Hospital

Keywords:

PSA (prostate specific antigen)

Screening

Introduction

The Urology Specialist Outpatient Clinic (SOPC) at Queen Mary Hospital frequently receives many referrals for raised prostate specific antigen (PSA). However, many patients are elderly – more than 75 years old or with a life expectancy of less than 10 years. Moreover, a large majority did not understand the significance of a raised PSA. Some were not even aware that PSA level was checked.

Objectives

In view of the increasing number of referrals for raised PSA in elderly patients at our Urology Clinic, we would like to study the reasons behind why PSA was checked initially, to see whether it was clinically indicated, and to study whether the checking of PSA affected patient management.

Methodology

This was a single center cross-sectional study on all whose PSA were checked from January 2014 to March 2014. Patient demographics, requesting specialty, indications of checking PSA were extracted from clinical records. PSA results and patients' clinical outcomes were followed up.

Result

2104 PSA requests of whose mean age 69.6 years old were reviewed. Mean PSA was 36.37ng/ml (median 2.7ng/ml). 429 (20.4%,/2014) had elevated PSA (>4ng/ml). 386 (90%,/429) were subsequently managed at the Urology Clinic. 128 patients (29.8%,/429) underwent trans-rectal ultrasound guided prostate biopsy. 49

patients(38%,/128) were diagnosed with prostate cancer, of which 23(46.9%,/49) opted for radical treatment - 10(43.5%,/23) underwent radical prostatectomy, 13(56.5%,/23) had radiotherapy. Multivariate logistic regression analysis showed that age and stage of disease were significantly higher in whom underwent radiotherapy. Age was the only statistically significant predictor for prostate cancer($p=0.001$). Other factors, like PSA level,requesting specialty and clinical indications were not predictors for prostate cancer detection.

PSA screening is a controversial topic. The latest international guidelines do not advocate PSA screening in the general population. Inappropriate PSA testing is widespread at our institute, with over one third of requests not supported by any relevant clinical information.

The pick-up rate of prostate cancer is only 1.7%, which is very low. Even for patients diagnosed to have local prostate cancer, less than two thirds of patients opted to have radical treatment. Patient counseling is important prior to checking of PSA. Patients should understand that PSA screening is a controversial issue and to understand the implications of raised PSA levels. Health professionals need to make shared decisions with the well-informed patient prior to checking PSA.