Prostate cancer (CaP) is the commonest urological malignancy in the west and the leading cause of death due to malignancy in the adult males [1]. The incidence in Sri Lanka is not known. A majority of cases are referred to urologists at tertiary care referral hospitals. Detection of CaP depends on the digital rectal examination (DRE), serum prostate specific antigen (PSA) levels and core needle biopsy. Of several biopsy methods transrectal ultrasound (TRUS) guided needle biopsy has emerged as the most sensitive and reliable method of detecting CaP. This technique and availability of PSA was introduced rather late to Sri Lanka. The present study, conducted at a tertiary care hospital in the private sector, evaluates the outcome of the first 134 patients who underwent the procedure after presenting with lower urinary tract symptoms (LUTS) and elevated PSA.

One hundred and thirty four patients with LUTS and elevated PSA (above 4ng/dL) were subjected to TRUS guided biopsy, irrespective of the DRE findings. The procedure was done as a day case by a radiologist. With the patient in left lateral position 6 to 8 systematic random core biopsies were obtained with a 18-gauge automatic biopsy needle and a 7.5 MHz endorectal rectal ultrasound probe. A single dose of gentamicin (1.5 mg/kg) was used for antibiotic prophylaxis and 2% lignocaine was used as the topical local anaesthetic. Biopsies were obtained without targeting specific areas. Biopsies were preserved in formalin-saline and reported by a single pathologist.

TURS appearance, complications and histopathology were recorded in standard data form immediately and at a subsequent clinic visit after 3 weeks.

Age distribution was 48–86 years. There were 38 (28%) CaP, 88 (66%) benign prostatic hyperplasia and eight (5%) chronic prostatitis. Correlation of histology of CaP according to the combined Gleason score and PSA value is shown in Table 1.

<table>
<thead>
<tr>
<th>PSA (ng/dL)</th>
<th>2-4</th>
<th>5-7</th>
<th>8-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>4–10</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11–20</td>
<td>0</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>21–40</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>&gt;40</td>
<td>0</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>25</td>
<td>13</td>
</tr>
</tbody>
</table>

To the Editors:

The outcome of elevated prostate specific antigen and transrectal ultrasound guided prostatic biopsy in detecting carcinoma of the prostate: initial experience in Sri Lanka.

Poor correlation of PSA with the Gleason score confirms previous studies. [2]. Cancer detection rate in our study (28%) compares well with that of previous studies and confirms the value of high PSA followed by TRUS biopsy [3]. However, the high negative biopsy rate needs further attention, as it leads to repeat biopsy and increased costs to patients. When high PSA density (PSA/prostatic weight>0.1)) was considered in an attempt to reduce the negative biopsy rate, cancer detection rate was not significantly different (28%), showing that it was not significantly more specific than PSA alone in selecting candidates for biopsy [4]. Although not used in this study, other variables such as free:total PSA ratio, age specific PSA levels and PSA velocity have been used for the same purpose without much success [3]. When TRUS appearance alone was considered the false positive rate was 44%, and the false negative rate 18%. Studies have shown that the positive predictive value of TRUS appearance of the prostate is low (26.9%), especially when biopsy is targeted for hypoechoic lesions [4]. If the disturbances of the capsular demarcation and presence of peripheral nodules were taken into account, predictive value could be increased to 44%, as demonstrated in the present study.

Complications reported were pain –10/134 (7%), primary rectal or urethral bleeding 3/134 (2%), symptomatic urinary tract infection 8/134 (7%), and acute urinary retention 3/134 (2%). Contrary to the popular belief, pain from the biopsy was minimal. With the low complication rates it confirms the feasibility of doing TRUS guided biopsy as a day Procedure [5].

At present screening for CaP is debatable and the predictability of PSA and TRUS biopsy in asymptomatic men is even more questionable. The present study would act as a stepping stone for further studies on this problem.

References


Coronary heart disease is the leading cause of hospital deaths in Sri Lanka [1]. The objective for patients with coronary heart disease is to reduce the risk of further coronary events. There is clear evidence that risk factor modification will help to achieve this objective [2], but studies in the United Kingdom [3] and Europe [2] have shown that the control of risk factors after a coronary event is often inadequate. Little data is available on the control and prevalence of risk factors in Sri Lankan patients. The purpose of our study was to assess the control of risk factors, use of appropriate medications in secondary prevention, advice given on secondary prevention and screening of first degree relatives for risk factors among patients after acute coronary events.

Patients with a history of myocardial infarction or unstable angina within the past 3 to 12 months attending medical wards and clinics at Sri Jayewardenepura General Hospital from August to December 2002 were included in this study. Data was collected using an interviewer-administered questionnaire. Results of biochemical tests were obtained from the patients’ medical records.

We examined whether the patients had achieved the goals recommended by guidelines for secondary prevention of coronary events drawn up by the Joint European Societies [4,5]. They were, to stop smoking, make healthy food choices, and become physically active; to achieve a body mass index (BMI) less than 25 kg/m², achieve a blood pressure below 140/90 mmHg, a total serum cholesterol level below 5 mmol/L, and LDL cholesterol concentration below 3 mmol/L. We studied a total of 143 patients (men 83). The sample consisted of patients aged from 34 to 80 years. A past history of myocardial infarction was present in 63%, and the rest had unstable angina. Blood pressure control had not achieved the target in 25.9% of the patients. Glycaemic control was poor in 27.3%. The total cholesterol was more than 5 mmol/L in 61.6%, and LDL cholesterol was raised above 3 mmol/L in 77.6%. The body mass index was above 25 kg/m² in 30.1%. The 75.5% of patients were not exercising at all. The recommended target of brisk walking 3 km three times weekly was achieved only in 11.4%. Consumption of a high fat diet was noted in 22.8% and 5.2% of patients continued to smoke. The reported use of beta blockers was 53.8%, ACE inhibitors 86%, aspirin 90.9% and lipid lowering drugs 56.6%.

Advice regarding the need to reduce the intake of fatty foods had not been given in 24.5% of patients. None of the patients had been told the importance of a regular exercise schedule. Only 45.5% had been advised to exercise. A 55.2% had not been told the importance of controlling hypertension and diabetes. Only 1.4% of patients had screened their first degree relatives for risk factors. The level of advice given to the patients on lifestyle modification by the health care team was clearly inadequate. The use of drugs in secondary prevention is satisfactory, especially of aspirin and beta-blockers. In general, our study showed that patients’ compliance with regard to drug therapy is more satisfactory than compliance to non-therapeutic measures. Introduction of cardiac rehabilitation clinics would enable better and focused attention, to be given for secondary prevention in patients after acute coronary events.

References