

# A painful neck lump: unusual presentation of prostate carcinoma

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### Introduction

Prostate carcinoma (PCa) is the second most common cancer in Sri Lankan males aged above 65 year (1). Though PCa is usually identified incidentally yet it can present with lower urinary tract symptoms, haematuria or back pain. The common sites of PCa metastasis are bones and regional lymph nodes but it can also spread to lung, liver and brain. We present a case of PCa presenting with a painful neck lump.

### Case report

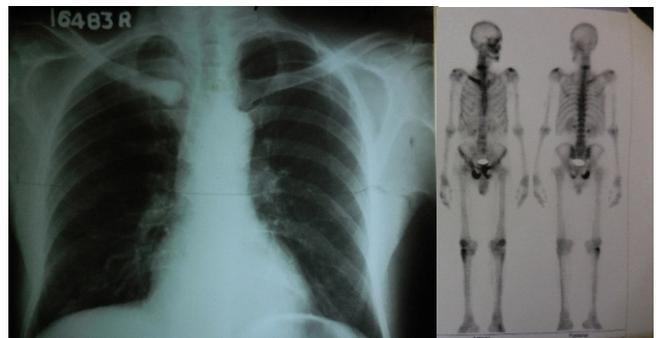
75 year old male patient presented with painful lump over right lower neck for one year (Fig.1). This lump was progressively increasing in size. It has been painful for the last two months. On direct questioning, he was found to have lower urinary tract symptoms for last 6 months. These symptoms were also increasing progressively. He had one episode of haematuria two months back which resolved spontaneously. He lost 5kg weight recently but he had good appetite. He had regular bowel habit. In the past he did not have diabetes or contact history of tuberculosis.

On examination he was emaciated with BMI of 17kg/m<sup>2</sup>. There were no cervical, axillary or inguinal lymphadenopathy. The lump was lying over the right sterno - clavicular joint. It was firm and tender. It was not pulsatile but was slightly warm. He had a scaphoid abdomen with no intra abdominal masses. Digital rectal examination revealed an irregularly enlarged prostate which was hard in consistency with absent medial groove.

His Chest X-ray (Fig – 2A) showed a hyper dense area over medial end of clavicle. Ultrasound scan revealed as soft tissue lesion which was continues with clavicle and there was no cervical lymphadenopathy. His thyroid was normal. His abdominal ultrasound scan revealed thickened bladder wall with enlarged prostate (200ml) with heterogeneous



**Figure 1.** Lump over medial end of right clavicle



**Figure 2.** A- Increased radio opacity of medial end of right clavicle. B - 99m Tc MDP bone scan. He also had multiple skeletal metastases over left pubic bone and right inferior pubic ramus.

echogenicity. He had residual urine of 150ml without upper urinary tract dilatation. PSA was more than 100ng/ml. His renal function tests were within normal limits.

He underwent a trans-rectal biopsy of prostate. Biopsy revealed as prostatic acinar adenocarcinoma with a Gleason score of 4+4 = 8. There was no perineural or vascular invasion. 99m Tc MDP bone scan (Fig-2B) revealed that increased tracer uptake in right clavicle.

He underwent a sub-capsular orchiectomy. After one month of surgery we found reduction in the size of neck lump and improvement in lower urinary tract symptoms. Currently he is followed up at the oncology clinic.

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## Discussion

Prostate adenocarcinoma is common in men over the age of 65 years and it is the second most common malignancy in men globally (2). It usually arises from the peripheral zone of the prostate whereas the benign prostatic hyperplasia from the transitional zone. Most prostate adenocarcinomas are slow growing tumours, Prostate adenocarcinomas are asymptomatic in most and identified incidentally or in autopsy specimens. It can present with symptoms of bladder outflow obstruction and bone metastasis, but atypical presentations also noted such as brain, breast metastasis and generalised lymphadenopathy.

On digital rectal examination PCa feels hard with irregular surface and absence of median groove. Rectal mucosa becomes immobile if PCa involves rectal wall, but it is rare.

The metastasis from PCa is usually osteoblastic (sclerotic). This is because of formation of bone close to metastatic site (3). In our patient chest X-ray showed enlarged medial end of right clavicle with increased bony density which reveals sclerotic metastasis to right clavicle.

Of course it is also possible to have osteolytic bone metastasis with PCa (3).

The prostate biopsy of this patient revealed acinar adenocarcinoma which is the commonest type of PCa. Very rarely there may be other variants like ductal adenocarcinoma which is associated with higher clinicopathological staging and poor prognosis.

PSA is prostate specific but not PCa specific. Elevated levels of PSA could be observed in conditions other than PCa such as bacterial prostatitis, acute urinary retention, following prostate biopsy etc. PSA levels in the range of 2.5 – 10 ng/ml imparts problem in diagnosing PCa. In these situations modifications of PSA measurements such as PSA density, PSA velocity & Free versus total PSA are utilised to predict the possibility of PCa. In the above patient the PSA was >100ng/dl which was clearly pointing to the possibility of metastatic PCa.

In the presence of biopsy proven PCa with elevated levels of PSA, the investigation of choice for staging the disease is bone scan. Technetium 99m-methyl diphosphonate (99mTc

MDP) is a radioisotope used for bone scans. Technetium uptake was increased at right medial end of clavicle confirming the metastasis. Also hotspots seen in left pubic bone and right inferior pubic ramus. Rarely a photopaenic defect (cold spot) may be visible in bone scans.

CT or MRI scans are useful to assess the local spread of PCa and the state of regional (pelvic) lymphnodes. Staging with CT/MRI imaging is mandatory before embarking on radical surgical interventions for PCa.

The aim of treatment of a patient with metastatic PCa is to control the disease by androgen blockade. Bilateral orchidectomy abolishes the testosterone coming from testis. Anti-androgen drugs, such as flutamide, are competitive blockers at receptor level. The total androgen block by LHRH agonist is expensive and also risks a flare-up worsening effect in the first 14 days of use (5). The PSA level dropped to 3.5ng/dl after orchidectomy. He is being followed up at the oncology clinic with regular PSA assessment.

All authors disclose no conflict of interest. The study was conducted in accordance with the ethical standards of the relevant institutional or national ethics committee and the Helsinki Declaration of 1975, as revised in 2000.

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### Learning Points:

- Prostate carcinoma will have to be considered in the differential diagnosis of elderly men presenting with painful neck lump especially over bony parts.
- The DRE should not be ignored in any elderly man, regardless of the presenting symptoms.