Clinical examination is very important in the practice of medicine. In patients presenting with a supraclavicular mass, a number of diseases including cancer should be ruled out. Two patients who presented with a bulky left supraclavicular mass were evaluated. Their medical history revealed complaints attributed to lower urinary tract infection. We performed histopathological examination of the lymph nodes with radiological evaluation of the thorax and abdomen. The final diagnoses were prostate cancer in both patients. It should always be kept in mind that prostate cancer is the most frequent cancer in elderly men, and although very unusual, the presenting finding can be cervical or supraclavicular lymphadenopathy; thus clinicians should be aware of urological examinations in such cases.

**Key words:** prostate cancer, supraclavicular lymphadenopathy, metastasis.

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**Metastatic prostate adenocarcinoma presenting as supraclavicular lymphadenopathy: a report of two cases**

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**Introduction**

Prostate cancer is the sixth most frequent cancer in the world (in the number of new cases), the third most common cancer in men, and the most frequent cancer in men in Europe, North America, and some parts of Africa [1]. The most general sites of prostate cancer distant metastasis are bones, regional lymph nodes, lung, liver, brain, and the epidural space [2]. However, metastasis from prostate cancer is an extremely unusual situation with a reported rate of 0.4% to 1% of cases [3]. We report two prostate cancer cases that presented with a supraclavicular bulky mass as the initial and the most bothersome symptom.

**Case 1**

A 78-year-old male who attended the emergency department with a bulky left supraclavicular mass was consulted because of lower urinary tract symptoms. Physical examination revealed a solid, multilobulated mass in the left supraclavicular region, measuring 9 cm at its longest diameter. He reported weight loss of 15 kg over the previous four months and symptoms related to lower urinary tract obstruction for five months.

Laboratory investigations in terms of whole blood count, blood chemistry and urinalysis were all in the normal ranges. A thorough genitourinary examination revealed no obvious pathology. Digital rectal examination (DRE) revealed a hard, irregular prostate with a volume of 58 cc in transrectal ultrasonography (TRU). Serum prostate-specific antigen (PSA) level was 171.0 ng/ml. Bone scintigraphic examination revealed a metastatic lesion at the fifth lumbar vertebra.

Fine needle biopsy of the left-sided supraclavicular lymph node was performed. Histological examination revealed a lymph node widely replaced by metastatic adenocarcinoma staining positive for PSA and prostate-specific acid phosphatase consistent with metastatic adenocarcinoma of the prostate (Fig. 1). Therefore, twelve quadrant fine needle biopsies were performed under TRU guidance which revealed a prostate cancer with a Gleason score of 8/10.

He was started on cyproterone acetate, 100 mg, three times a day and leuprorelin acetate injections, 3.75 mg, monthly. Ten months later, the patient had significant symptomatic relief with a marked reduction in supraclavicular lymphadenopathy and a decreased prostate-specific antigen level of 12.1 ng/ml.
with prostate cancer presenting at first with supraclavicular lymphadenopathy, in which the diagnosis was verified by prostate biopsy in 14 patients. They reported that only 42% of all patients had an abnormal DRE [13]. Case 1 also had an abnormal DRE. Woo et al. described a 76-year-old patient presenting with supraclavicular lymphadenopathy. They noted a normal prostate on DRE. A PSA performed a few days after admission was 326 ng/ml and a fine needle biopsy of the lymphadenopathy confirmed a prostate cancer metastasis [14]. Cho et al. reported 26 cases of metastatic prostate cancer in supradiaphragmatic lymph nodes, in which only 7 cases had a history of prostate cancer; they noted that 38% had an abnormal rectal examination [15].

Although prostate cancer is widespread, the prostate is often overlooked as the first site for men presenting with supraclavicular lymph node metastases [5]. Fine needle aspiration biopsy of supraclavicular lymph nodes may be useful for pathological diagnosis of prostate cancer metastasis. In our patients, serum PSA level and immunohistochemical staining for PSA in biopsy material were used in detection of the primary location of the cancer. Two patients had highly elevated serum PSA levels, and bone scintigraphic examination revealed metastatic lesions.

It should always be kept in mind that prostate cancer is the most frequent cancer in elderly men, and although very unusual, the presenting finding can be a cervical or supraclavicular lymphadenopathy; thus clinicians should be aware of urological examinations of such cases.

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