Abstract:
Prostate cancer presents in many ways including in-growth, local invasion, regional lymphnode metastasis and skeletal system metastasis. Rarely metastases to non regional supradiaphragmatic lymph nodes occurs.

Keyword : CARCINOMA PROSTATE, LYMPH NODE METASTASIS, SKELETAL SYSTEM

Case History: Fifty five years old gentleman, a known case of systemic hypertension was admitted in the medical ward with features of cerebro-vascular accident. While the patient was examined there was an incidental finding of enlarged left supra clavicular lymph node routine blood investigations were done nothing was contributory to substantiate the enlarged cervical lymphadenopathy. Fine needle aspiration biopsy of the enlarged lymph node was done, which revealed adenocarcinomatous deposits in the lymph node. General surgical, urological, ent opinion was obtained. Upper and lower GI scope were done and was normal. Direct and indirect laryngoscopy were done and found to be normal. Urological history did not reveal any positive urinary symptoms. Examination of cervical lymph nodes revealed a multiple firm to hard, discrete lymph nodes in the left supra clavicular fossa. No other enlarged lymph nodes were palpable. Digital rectal examination revealed hard irregular, nodular prostate. Rectal mucosa was mobile over the prostate with normal sphincter tone. Investigations like urine routine examination, blood investigations like renal function tests, liver function tests, serum calcium, alkaline phosphatase were done and was normal. Serum PSA – 679ng/ml. chest x-ray, skeletal survey were normal. CECT of the abdomen and pelvis revealed irregular, isodense lesions in the prostate with enhancement seen. There was extra capsular extension with left seminal vesicle invasion seen.
There was multiple enlarged nodes in the iliac, para-aortic lymph nodes seen. CT of the chest revealed enlarged nodes in the posterior mediastinum.

Per-rectal tru-cut biopsy of the of the prostate revealed adenocarcinoma of the prostate with gleason score (5+4)9. Biopsy of the cervical node revealed metastatic adenocarcinoma – poorly differentiated. Patient was assessed and bilateral orchiectomy was done under spinal anaesthesia. Patient was started on anti-androgen therapy. Post operatively patient was followed up after 4 weeks of therapy, there was marked reduction in the size of cervical lymph nodes the serum PSA levels dropped to lower levels.

Discussion:
Prostate cancer mainly manifests with irritative and rarely obstructive voiding symptom. Prostate cancer spreads by direct invasion to pelvic organs or vertebral bodies. Lymphatic spread occurs to obturator, iliac, pre-sacral lymph nodes. further spread can occur to para-aortic lymph nodes. Spread to supra clavicular lymph node is uncommon in prostate cancer. One series of case analysis reports that left supra clavicular fossa was the most common site of extra skeletal non regional lymphatic spread. The tumor cells gain entry through the thoracic duct, left subclavian vein by retro grade spread. another study revealed 0.4% of patients with prostate cancer at autopsy had metastases to cervical lymph node . fine needle aspiration of the cervical lymph node with special immuno-histochemical staining is helpful in the confirmation of diagnosis. The median time to progression and survival ranged from 12 to 18 months and 2 to 3 years respectively, as per literature. All patients respond well to complete androgen blockade.

Prostate carcinoma should be considered in elderly men with cervical lymhadenopathy even in the absence of lower urinary tract symptoms. They should be evaluated with serum PSA, skeletal survey, immune-histo chemical staining for final diagnosis and hormone treatment have been found to be of benefit in these patients.

Reference :
2 Histopathology 1992;21:149-54