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Case Report

An Unusual Case of Left Supraclavicular Swelling

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Abstract

Neck swellings form a major chunk of ENT OPD. While midline thyroid swellings and lateral lymph node enlargements constitute majority of the cases, supraclavicular swellings, especially on the left side often turn out to be interesting cases. In this article we present the case of a patient who presented with an interesting left supraclavicular swelling.

Through meticulous clinical evaluation, radiological imaging, pathological examination we reveal the complexity hidden within this enigmatic swelling.

Keywords: Supraclavicular Swelling; CA Prostate; Neck Metastasis

Introduction

Lateral neck swellings are an integral constituent of ENT OPD. Most of these cases are comfortably tackled with the armamentarium of diagnostic tools available viz USG, FNAC etc. while lymphadenopathy, both reactive or metastatic, tuberculosis and benign cysts like branchial cyst forms the major differentials of such lateral neck swellings. Lymph nodes are well connected with lymphatic channels and each station is known to drain a specific area of head and neck viscera. Supraclavicular swellings, however, are notorious for odd presentations, especially on the left side, due to the drainage of thoracic duct. Lesions from below clavicle drain commonly to left supraclavicular region. These are more frequently encountered in older adults, usually >50 years of age and peak incidence occurs between 60 to 75 years of age [1]. This type of swelling has a potential association with pathologies originating from distant primary sites, such as the lungs, gastrointestinal tract, or from the breast without having any other primary symptoms.

Here we present a case of one such left supraclavicular swelling that put the surgeon and the pathologist in diagnostic dilemma, more so because of absence of any primary site symptoms [2].

Case Presentation

A 70 year old male patient came to the ENT outpatient department with complaint of left supraclavicular neck swelling since 1 month. Physical examination revealed a bosselated, firm to hard mass, approximately 4x4 cm in size, situated in the supraclavicular fossa and the clinician was able to get below the swelling. Rest entire ENT examination was normal. Radiological investigation including CECT thorax unveiled multiple enlarged lymph nodes in left supraclavicular and axillary region with largest

measuring 50x41 mm which was likely to be a lymphoma. Colour Doppler Flow imaging further highlighted multiple lymph nodes of variable sizes with loss of fatty hilum and increased vascularity involving left supraclavicular region largest measuring 47x30 mm. FNAC of the mass was performed and based on all the above findings, features were suggestive of malignancy but could not be typed due to poorly differentiated cells. Subsequently the mass was surgically excised as a whole and specimen was sent for histopathology which was then reported to be a poorly differentiated malignancy. Finally Immunohistochemistry was ordered, where the tumour cells displayed positivity for NKX3.1, PSA, CK, SYNAPTOPHYSIN (weak) and was negative for CDX2, TTF1, CD56 chromogranin, INSM1, SATB2, PR, calcitonin. KI-67 was 10% (Figure 1). These findings collectively led to the final diagnosis: the left supraclavicular neck swelling was a metastatic manifestation of primary prostate carcinoma. PSA was done on followup which was >100. Patient was referred to Urology dept for further management.

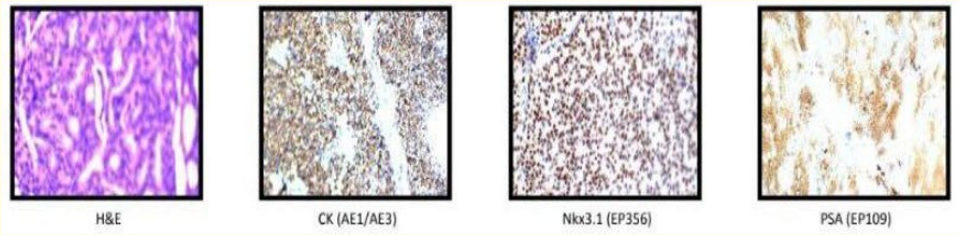

Figure 1: Image showing IHC staining of the tissue.

Discussion

Right and left supraclavicular lymph nodes drain the neck via efferent lymphatic vessels coming from the accessory nerve lymph node chains, which belong to sublevel Va [3]. However, these nodes mainly drain structures in the thorax and abdomen. More specifically, the right supraclavicular lymph nodes drain the breast, lung and upper oesophagus, while the left supraclavicular lymph nodes have more extensive drainage sites and drain distant regions. One of the left supraclavicular lymph nodes, known as the Virchow's Node drain thoracic duct, abdomen and thorax [4]. Enlargement of the left supraclavicular node, in particular, may suggest a malignant disease (e.g., malignant lymphoma or rhabdomyosarcoma) arising in the abdomen and Supra-diaphragmatic extension of prostate cancer. This occurs hematogenously via the Batson's Plexus, network of valveless veins connecting the deep pelvic veins and thoracic veins to internal vertebral venous plexus, to supraclavicular region [5]. However, it is essential to state here that supraclavicular metastasis is a very rare presentation of Ca prostate. It is known to metastasise to bone (vertebra) and lungs more commonly. Only about 0.4% of patients with advanced prostate cancer present with cervical lymph node metastasis. Also cervical metastasis usually occurs in late stages when urinary symptoms and/or bone metastasis is already profound. This case presents a compelling diagnostic challenge in the field of ENT due to the rarity of metastatic prostate carcinoma presenting as supraclavicular neck swelling in a 70-year-oldmale in absence of classical lower urinary tract symptoms. The atypical presentation of primary prostate carcinoma with supraclavicular metastasis underscores the importance of considering diverse differential diagnoses, even when clinical and radiological features may suggest lymphoma. A thorough physical examination along with investigations including serum PSA, histopathology, and immunohistochemistry must be carried out in order to early diagnose and treat the probable cause.

Conclusion

This unique case serves as a valuable reminder that metastatic primary prostate carcinoma can manifest as left sided supraclavicular neck swelling even in the absence of urinary symptoms viz-a-viz ENT specialists should maintain a high index of suspicion for prostate carcinoma/lower abdominal primaries when evaluating patients with supraclavicular neck swelling and it should be considered as a potential differential diagnosis even in absence of primary site symptoms.

Conflict of Interest

None.

Financial Disclosure

None.

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