Cervical lymph node metastasis from a remote primary tumour site-A Diagnostic conundrum

Sir,

Cervical cancer is the most common genital tract malignancy among women, accounting for many deaths in developing countries like India.\(^1\) Sexually transmitted Human papillomavirus (HPV) infection subtypes 16 and 18 are the most important risk factor for pre-invasive and invasive lesions of the cervix.\(^2\) The most common histology of cervical cancer is squamous cell carcinoma followed by adenocarcinoma of cervix. Lymphatic spread of cervical cancer is mainly through parametrial and pelvic lymphnodes\(^3\). Supraclavicular lymph nodes may be involved in advanced disease or in cases with recurrent cervical cancer. Most of the metastasis to neck nodes arise from primary tumors of the head and neck\(^4\). Lymphatic spread to neck nodes from primary adenocarcinoma of cervix is extremely rare and we are reporting one such case. A 54 year old multiparous postmenopausal woman presented to otorhinology department with complaints of a lump noted in the left side of the neck for two months duration. There was no history of change in voice, dysphagia, loss of weight or easy fatigability. Ultrasound of the neck revealed multiple enlarged hypoechoic lymphnodes with irregular margins and perinodal fat stranding in the left levels II, III, IV and V, largest measuring 1.2 cm in size and fatty hilum was not noted in any of the enlarged nodes. Salivary glands and thyroid lobes were normal. Ultrasound neck was reported as left cervical lymphadenopathy with a high suspicion of malignancy. Fine needle aspiration cytology of the left level V cervical lymph node was performed which was suggestive of carcinomatous deposits in the nodes. (Fig 1) Ultrasoundography of whole abdomen and pelvis revealed no abnormality except for a bulky cervix. The patient was then referred to department of Gynecology for further evaluation of bulky cervix. The patient was asymptomatic for any complaints such as white discharge per vaginum, pain abdomen and postmenopausal bleeding.

Her vitals were stable and on general examination, there was no pallor, icterus or pedal edema. Left cervical lymph node was palpable, 2 cm in size, non-tender and firm in consistency. Systemic and abdominal examination were within normal limits. On per speculum examination, cervix and vagina were apparently normal. (Fig 2), Uterus was anteverted, normal in size and parametrium was free on per rectal examination. PAP smear showed atypical cells arranged predominantly in clusters, few singly scattered and occasional ones in vague acinar pattern. These atypical cells have round oval nucleus, increase nuclear cytoplasmic ration, hyperchromatic nuclei, irregular nuclear borders, nuclear overlapping with moderate amount of cytoplasm and tumour diasthesis which was interpretated as adenocarcinoma, possibly endocervical (Fig 3). Further evaluation with CT and MRI imaging of head and neck, abdomen and pelvis revealed intense heterogenous enhancing mass.

Fig 1: Fine needle aspiration cytology of the left level V cervical lymph node suggestive of 87 carcinomatous deposits in the nodes.

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lesion in the uterine cervix without any parametrial invasion consistent with cervical carcinoma. No other primary or secondaries were detected except for the neck nodes. Multiple discrete small volume

Fig 2: Apparently normal appearing cervix on per speculum examination

hypoenhancing pelvic, retroperitoneal and retrocrural nodes were reported. Similar nodes in mediastinum and left side of neck were present which was probably suggestive of metastatic lymphadenopathy from cervical malignancy. Colposcopy examination under anesthesia was performed which revealed a bulky cervix with a normal appearing ectocervix. However, the endocervix was irregular and friable. Cervical biopsy was performed and the histopathological examination of the specimen confirmed the diagnosis of adenocarcinoma of endocervix (Fig 4).

The prognosis for metastatic carcinoma of the cervix is poor and metastases to the neck signals a grave prognosis. 5

Fig 3: Adenocarcinoma of the cervix on PAP smear

Carcinoma of the cervix spreads by lymphatics from the pelvis up to the para-aortic nodes, from here to the mediastinum and then into the thoracic duct. Spread can occur from the pelvis into the hepatic region through the diaphragm and the thoracic duct. The thoracic duct communicates with the central venous system in the neck at the junction of the left subclavian and internal jugular vein.

Fig 4: Adenocarcinoma of the cervix on Cervical biopsy

The left-sided supraclavicular node represents the final common path of the body's infra-diaphragmatic lymphatic drainage. Small communications exist from the left side to the right side of the neck6. The incidence of metastasis of carcinoma cervix to the left supraclavicular nodes is reported as 0.1% in untreated cases. Our patient did not present with any symptoms related to cervical cancer and on clinical examination cervix appeared normal. However, CT and MRI showed malignancy in endocervical region. Small cell cancer of the cervix is known to be aggressive with early haematogenous and extrapelvic lymph node metastasis8. However, it is very unusual for adenocarcinoma of the cervix to behave in an aggressive way with metastasis to extrapelvic neck lymph nodes as in our case.

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