



An Unusual Case of Isolated Portocaval Lymph Node Metastasis from Nasopharyngeal Carcinoma

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Keywords

Distant metastasis; Portocaval; Nasopharyngeal cancer

Case Report

We report an unusual case of isolated Portocaval lymph node metastasis in a patient of nasopharyngeal carcinoma. To the best of our knowledge, this is the first such case to be reported in literature.

A 70-year-old-male presented with history of nasal bleeding since 2 years and sensation of mass in left nasal cavity since 8 months. The bleeding was spontaneous in onset, left sided, and resolved on itself with no seasonal variation. There were no palpable neck nodes. Contrast Enhanced Computed Tomography (CECT) showed a polypoidal lesion in the antero-posterior part of left nasal cavity with mass in nasopharynx with bone erosion. Nasal endoscopy revealed an ulceroproliferative friable growth at bilateral fossa of Rosenmuller obscuring the superior posterior part of nasopharynx. Biopsy from the growth was suggestive of nasopharyngeal carcinoma, non-keratinizing undifferentiated type (Figure 1). PET-CT showed FDG avid (SUV max: 8.7) heterogeneously enhancing soft tissue mass involving nasopharynx, measuring 3.1 cm × 2.6 cm, extending superiorly involving clivus with sclerotic changes and FDG non-avid soft tissue thickening in left nasal cavity (Figure 2). FDG avid (SUV max: 8.7) portocaval lymph node was noted, measuring 2.4 cm × 2.0 cm (Figure 2). Ultrasound guided Fine Needle Aspiration Cytology (FNAC) from portocaval lymph node was suggestive of metastatic carcinomatous deposits (Figure 3). Due to predominant local symptoms, patient was started on concurrent chemo radiation. He received external beam radiotherapy of 66 Gy in 33 fractions with weekly concurrent cisplatin at dose of 35 mg/m². The patient refused for adjuvant systemic chemotherapy. Follow-up PET/CT after 4 months showed complete resolution of FDG avidity and size of lesion in nasopharynx with mild FDG avid portocaval lymph node, measuring 1.4 cm × 1.2 cm (Figure 4).

Nasopharyngeal cancer spreads by local infiltration, lymphatic and haematogenous metastasis. Due to rich lymphatic network of nasopharynx, cervical lymphatic metastasis is present in 70% to 85% of patients at presentation and bilaterality is seen in 40% to 50% of patients [1,2]. Nodal

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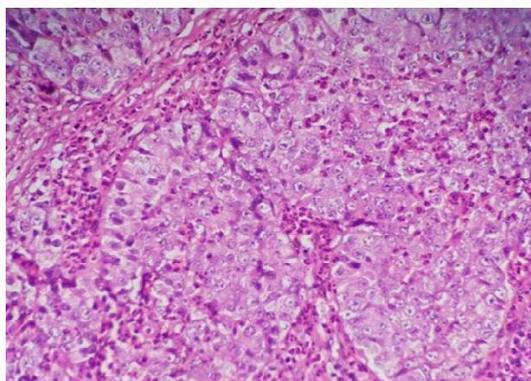


Figure 1: Section showing nests of anaplastic tumor cells with vesicular nuclei, conspicuous eosinophilic nucleoli and amphophilic cytoplasm. Intervening stroma shows moderate mixed inflammation (H&E x200).

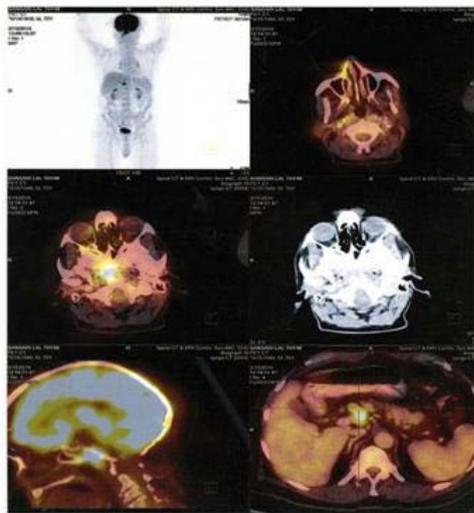


Figure 2: PET-CT showing FDG avid lesion in nasopharynx and FDG avid portocaval lymph node.

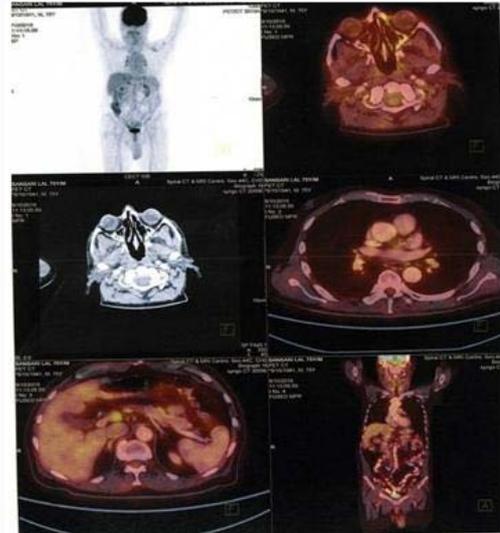


Figure 4: PET-CT showing complete resolution of nasopharyngeal lesion with significant reduction in FDG avidity and size of portocaval lymph node.

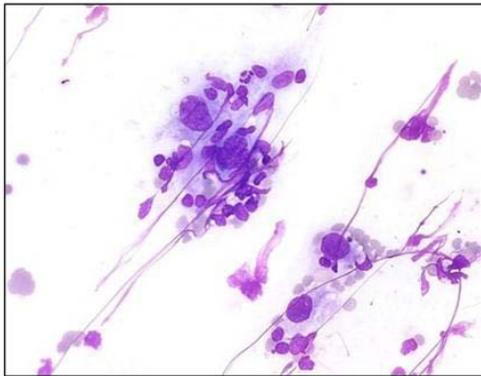


Figure 3: Aspirate smear showing large tumor cells with vesicular nuclei, prominent nucleoli and pale fragile cytoplasm in a background of scattered lymphoid cells (MGG x200).

metastasis follows an orderly fashion and skip metastasis is seen in 0.5% to 7.9% [2]. Distant metastasis is seen in 6% of the patients at presentation and the most frequent sites of distant metastases are bone followed by lung, liver, and distant nodes [3,4]. The incidence of distant metastasis is strongly related to the extent of cervical lymph nodal involvement. Isolated portocaval lymph node metastasis in nasopharyngeal cancer is a rare occurrence. Distant metastasis to mediastinal or abdominal nodes has been found in 3% to 5% of patients, usually in association with advanced nodal metastases in supraclavicular area [5]. The patient had no clinically palpable cervical nodes and no apparent nodes on CT and PET-CT but had evidence

of increased Standardized Uptake Value (SUV) in portocaval lymph node which was suggestive of metastasis and confirmed on FNAC. The role of PET-CT in nasopharyngeal cancer is still not defined. 18F-FDG PET/CT examination has showed higher sensitivity in detecting distant metastases than conventional imaging.

The present case is reported because of its rarity and uniqueness. The patient had isolated portocaval lymph node metastasis in the absence of lymphatic and haematogenous metastasis elsewhere.

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