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Case Study

A RARE CASE STUDY OF MALIGNANT LYMPHOMA OF SUBMANDIBULAR GLAND

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Abstract
Lymphomas are neoplastic diseases of lymph nodes. Lymphoma of the salivary gland is rare accounting for less than 5% of lymphomas overall. Primary malignant lymphomas in the salivary glands are relatively rare. Clinical presentation is not characteristic and the disease is often overlooked resulting in diagnosis and treatment delays.

Introduction

Many times head and neck lymphadenopathy may be caused by lymphomas. Extranodal lymphomas are seen almost exclusively as non-Hodgkin's lymphoma (NHL) and these constitute 10-20% of all lymphomas. Adult NHLs commonly arise from B cells. Swelling of unknown origin presenting as NHL of the head and neck may prove to be a challenge for diagnosis. Salivary gland lymphomas are quite rare and the majority of them originate from B cells.

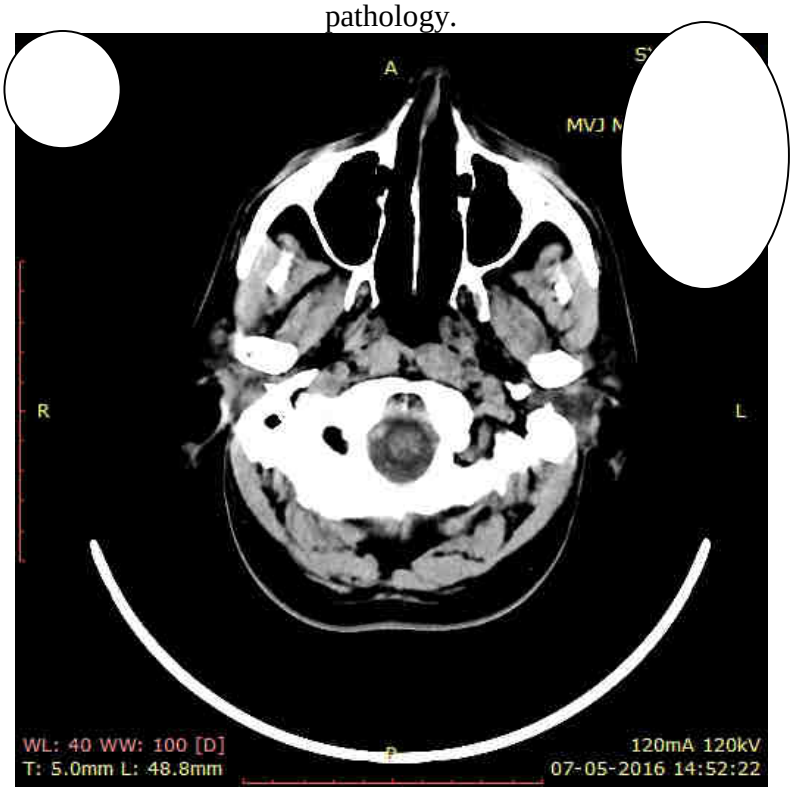
Case report

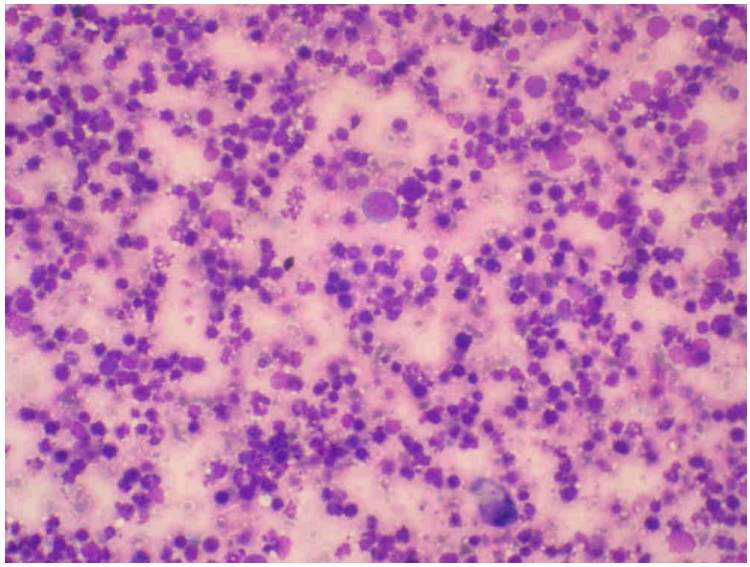
Mr. X a 40-year-old male patient from Kolar presented with c/o swelling over the left side of face since 6 months. The patient was Apparently Normal, 6 months back when he noticed a swelling over the left side of his face, insidious in onset, gradually progressive, initially was of the size of a

marble. The patient consulted a local doctor 4 months back, was treated with antibiotics. However, the swelling did not decrease.
No H/o of increase size of swelling upon consuming food No H/o fever/ loss of weight /loss of appetite.
No H/o of any other swelling over neck/tooth ache/difficulty in swallowing.
Past history : - No H/o TB / DM / HTN in the past
Family History: No H/o Similar complaints in the family
Personal History: Diet: Mixed, Appetite is good Sleep is sound B & B - regular
History of tobacco chewing + Beedi Smoker since 10 years.
Local Examination:
Inspection: A 10 X 8 CM swelling over the left side of face & submandibular triangle, which is 5CM from lobule of ear & 2CM from the angle of mouth with smooth surface &ill defined margin.
The skin over the swelling is normal.
Palpation: No local rise of Temp / Tenderness, well-defined 10 X 8 CM swelling which is hard in consistency& fixed
Carotid artery pulsation - felt on both sides.
Examination of facial nerve: Normal
Examination of oral cavity
The absence of 1st canine, 2nd premolar & 1 Molar of the left upper jaw.
Absence of 2 Molar of right lower jaw
Lips – Normal
Tongue - Normal
Gums, hard palate - black color stain with the eythematous patch.
Floor of Mouth – Normal
Examinations of lymph nodes
There is a 2 X 2 CM left Submental lymph mode palpable, firm in consistency with a well defined margin.
Right submandibular lymph node- Palpable
Clinical diagnosis-jaw swellings? / submandibular ca? Investigations

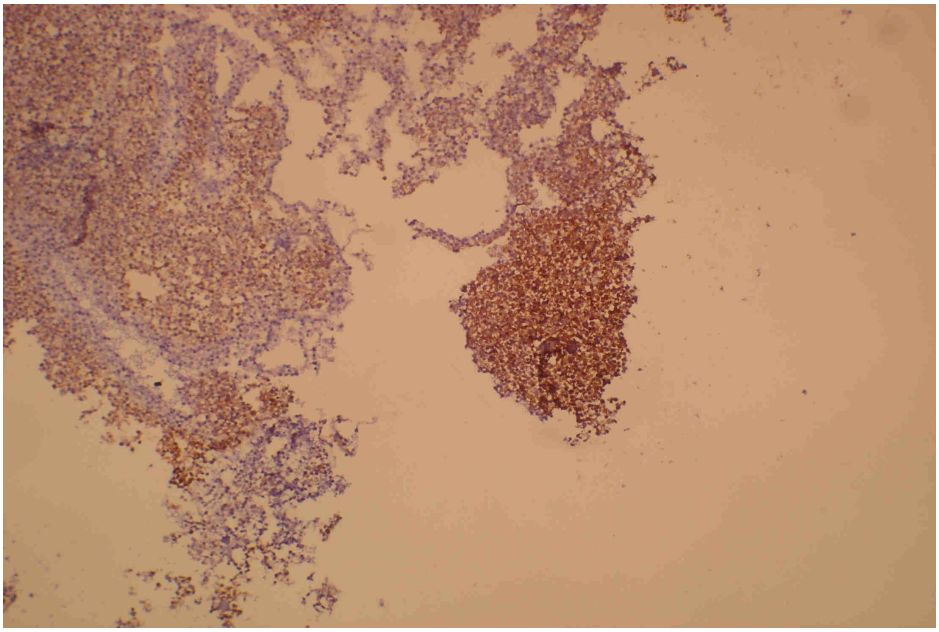
ORTHOPANTOGRAM-normal

CECT neck shows well-defined hypodense of L Submandibular gland suggestive of neoplastic pathology.





On FNAC- Lymphoproliferative Lesion with high nuclear cytoplasmic ratio with neutrophil.



Immunohistochemistry –B cell lymphoma positive for CD20.

Treatment

CHOP Therapy -3 cycles were given.

Each cycle after 21 days.

DNS → 2 hourly 250 ml/hr.
Inj Pan 40 mg stat
Inj Emset stat
Inj Cyclophosphamide 250 ml/hr
700 mg
Inj: Adriamycin 1 O NS 250 ml/hr
80 mg
Inj: 5% Dextrose
Inj : Oncovin – 2mg in 100 ml NS
Tab : Prednisolone 10 mg 21 days
1 DNS

Post-chemotherapy picture where swelling has disappeared almost completely.

Discussion

Non-Hodgkin's lymphoma arises from a lymphocyte progenitor and comprises a heterogeneous group of highly diverse malignancies.25-40% of NHLs are extranodal in origin and usually manifest in the gastrointestinal tract, followed by the head and neck region. NHL mostly occurs in the pediatric age group in the head and neck region.

The etiological factor for primary lymphoma of the salivary gland region is unclear. Oral lymphomas are frequently seen with acquired immune deficiency syndrome (AIDS). In certain individuals, it might serve as the first presentation of AIDS. The present case was seronegative for HIV.

The most common presentation of primary oral and paraoral lymphoma is a painless local mass with superficial ulceration. In the present case, the patient presented with progressive painless swelling of the face involving mainly the submandibular gland. Lymphoma of the ocular adnexa is the most common in those aged over 60 years. Orbital lymphoma can involve the lacrimal gland, extraocular muscles, orbital fat, eyelids, and conjunctiva. Based on the morphology, cell lineage, and immunohistochemical findings, the present case was categorized as aggressive NHL of diffuse large B-cell type.

To determine the prognosis and to guide therapy for NHL, staging is important. The Ann Arbor staging system is one of the most widely used systems and includes physical examination, hematological tests, imaging studies, and selective biopsies. According to the Ann Arbor system, stage IVB (stage IV: diffuse or disseminated foci of involvement of one or more extra lymphatic organs or tissues; E: extranodal organ involvement; B: the presence of systemic symptoms like fever and loss of weight) was ascribed. All IPI parameters were found to be positive in this case, thus categorizing our patient as a high-risk case.

Staging of salivary gland lymphoma plays a major role in the management and enables more favorable prognosis.NHL is associated with significant morbidity. Early stages of NHL (minimal lymph node involvement) are more manageable with a greater prospect of long-term disease-free survival, whereas advanced stages (widespread in the lymph nodes) of the disease have a lower prognostic index. Such patients are also vulnerable to infectious diseases that may involve multiple organ systems (e.g. central nervous system, liver).

In conclusion, the present case emphasizes the importance of imaging and prognostic markers for staging, which is essential for management.

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