HODGKINS LYMPHOMA OF THE MAXILLARY SINUS: A RARE OCCURRENCE

Rayakar Vinayak V[1], K. B. Chandrappa[2], K.P. Basavaraju[3]

HOW TO CITE THIS ARTICLE:
Rayakar Vinayak V, K.B Chandrappa, K.P Basavaraju. "Hodgkins lymphoma of the maxillary sinus: A rare occurrence". Journal of Evolution of Medical and Dental Sciences 2013; Vol2, Issue 34, August 26; Page: 6474-6477.

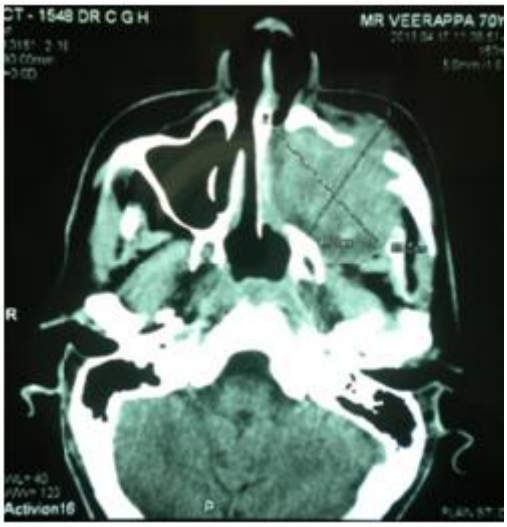
INTRODUCTION: The maxillary sinus is a rare anatomic site for Hodgkin's lymphoma. Lymphoma in a patient who presents with disease in an unusual site is difficult to diagnose. We report the case of a 70-year-old male who presented with unilateral nasal obstruction and facial pain. **CASE DESCRIPTION:** A 70 year old male, known diabetic and hypertensive, presented to OPD with complaints of left sided nasal obstruction and facial pain since 4 months. Examination revealed mucopurulent discharge in the left nasal cavity, swelling of left cheek and enlarged left submandibular lymph node. CT PNS revealed erosion of walls of left maxillary sinus with partial erosion of nasal septum. Patient underwent total maxillectomy left side. The histopathology was reported as Hodgkin's lymphoma of the maxillary sinus- nodular sclerosis type. Post operative recovery was uneventful. Patient has been planned for further chemo and radiotherapy as per the guidelines stated by national cancer institute. **CONCLUSION:** The maxillary sinus is a rare anatomic site for the presence of Hodgkin's lymphoma. Because making such a diagnosis is difficult, close attention to radiologic and pathologic findings is important.
KEYWORDS: Maxillary sinus carcinoma, extra nodal Hodgkin's lymphoma.

INTRODUCTION: Hodgkin lymphoma rarely occurs primarily as an extra nodal entity, especially in the head and neck region.[1] we describe a case of extra nodal Hodgkin lymphoma of the maxillary sinus.

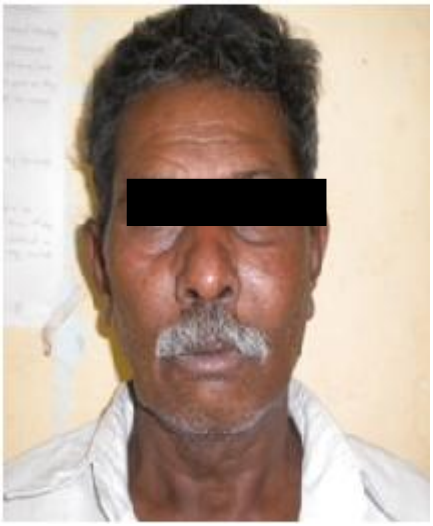
CASE REPORT: A 70 year old male, known diabetic and hypertensive, presented to OPD with complaints of left sided nasal obstruction and facial pain for 4 months. Examination revealed mucopurulent discharge in the left nasal cavity, swelling of left cheek and enlarged left submandibular lymph node which was of soft consistency, mobile and non tender with normal overlying skin the left nasal cavity was found to be completely obstructed and the mucosa was markedly hypertrophied. The medial maxillary wall of the inferior turbinate bulged into the left nasal cavity. A polypoid mass was seen emanating from the left middle meatus, and it occluded the nasal cavity. Examination with rigid endoscope through the opposite naris detected no abnormalities. Biopsy of this mass revealed undifferentiated lymphoepithelial carcinoma. A review of systems indicated an excellent performance status with no weight loss, fever, or night sweats. Cranial nerve examination was normal except for the fifth nerve (with numbness over the cheek left side)

CT PNS revealed erosion of antero-lateral, postero-lateral and medial walls of left maxillary sinus with soft tissue bulge in left infraorbital region, left infratemporal fossa and left half of the nasal cavity with partial erosion of nasal septum. Left ethmoidal air cells were also involved.

CT SCAN

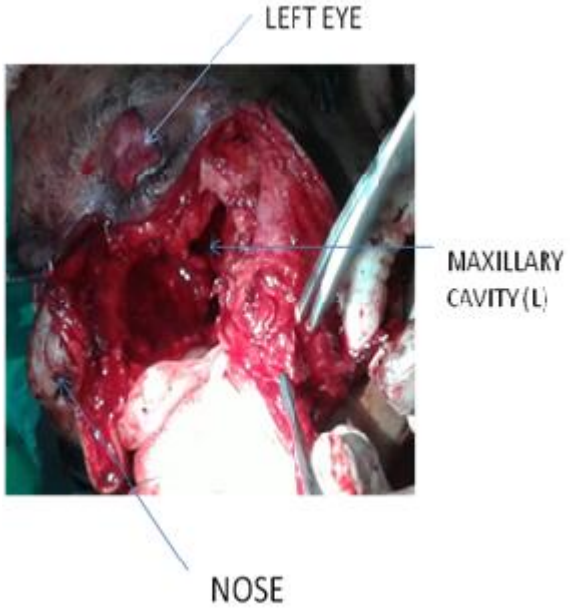


PREOPERATIVE PICTURE

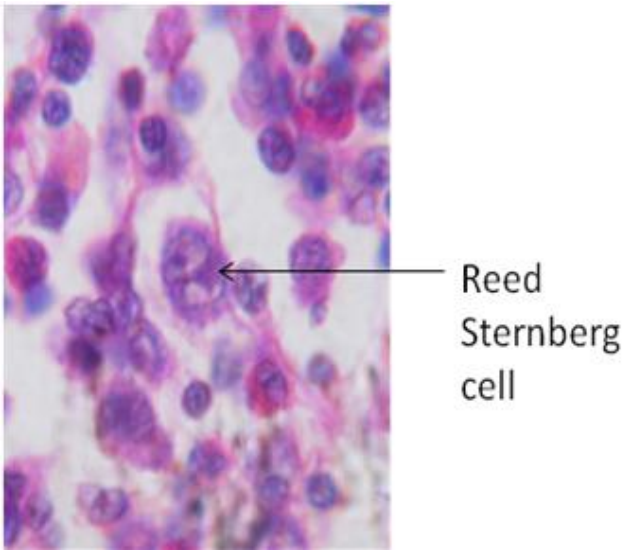


The patient underwent total maxillectomy left side .The final pathologic findings were consistent with classic extra nodal Hodgkin's lymphoma of the nodular sclerosis subtype. FNAC of the left submandibular lymph node revealed inflammatory changes with negative malignant changes. Patient has been started on chemotherapy COPP regimen since 1 month and has tolerated the treatment quite well.

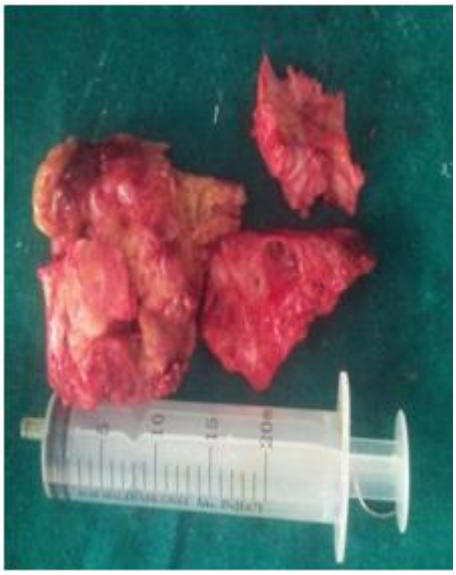
INTRAOPERATIVE



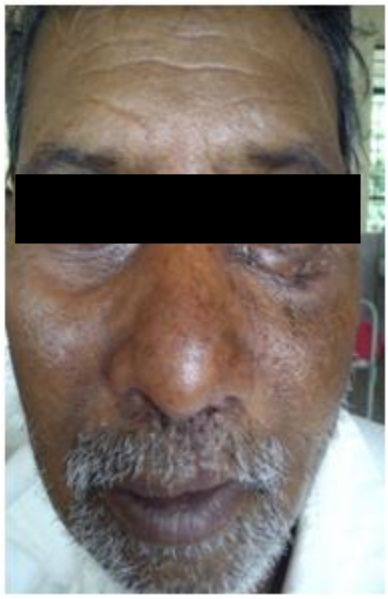
HISTOPATHOLOGY



EXCISED SPECIMEN



AFTER SUTURE REMOVAL



DISCUSSION: The maxillary sinus is a rare anatomic site for the presence of Hodgkin's lymphoma. Typically, lymphomas of the head and neck region appear as cervical lymphadenopathy. Patients who present with extra nodal involvement usually have disease located in the Waldeyer tonsillar ring. Other sites of extra nodal involvement are rare. Urquhart and Berg reviewed the records of 311 patients with head and neck lymphoma and found that 4% had extra nodal Hodgkin lymphoma and 23% had extra nodal non-Hodgkin lymphoma.[2] The other patients in that series presented with lymphadenopathy alone.

In patients with malignant tumors of the maxillary sinus, the most common histology diagnoses are squamous cell carcinoma (39 to 62% of cases) and adenoid cystic carcinoma (12 to 22%).[1, 3, 4] Of all maxillary sinus malignancies, lymphoma occurs in less than 10% of cases.[1, 3, 4]

Shlansky-Goldberg et al described the case of nodular sclerosing Hodgkin lymphoma.[5]

Another case has been reported by Jennifer L Peterson et al in 2012 where the patient underwent an extensive surgical resection, which involved a right anterior and posterior ethmoidectomy, sphenoidotomy, a maxillary antrostomy, and a frontal sinusotomy with the removal of contents and an inferior turbinate reduction. The final pathologic findings were consistent with classic extra nodal Hodgkin lymphoma of the mixed cellularity subtype.[6]

Our review of the medical literature revealed that very few cases of Hodgkin's lymphoma involving the maxillary sinus have been reported so far (Shlansky-Goldberg et al[5], Lello and Raubenheimer[7], and Peterson et al[6]). Most patients with Hodgkin's lymphoma that involved extra nodal sites in the head and neck had received standard treatment with chemotherapy and radiotherapy, and this treatment approach resulted in excellent control rates.

The chemotherapeutic regimens in these reports varied according to the years in which these patients were treated. Chemotherapeutic regimens currently recommended for Hodgkin lymphoma are: ABVD- doxorubicin (Adriamycin), bleomycin, vinblastine, dacarbazine; Stanford V-

mechlorethamine, vincristine, prednisone, doxorubicin, bleomycin, vinblastine, etoposide; and COPP- cyclophosphamide, Oncovin, procarbazine, prednisone.

CONCLUSION: Though a rare entity, Hodgkin's lymphoma of the maxillary sinus should be considered as one of the differential diagnosis of maxillary carcinoma.
Further studies are required regarding the protocol to proceed if the biopsy report suggests undifferentiated lymphoepithelial carcinoma

REFRENCES:

1. Cantù G, Bimbi G, Miceli R, et al. Lymph node metastases in malignant tumors of the paranasal sinuses: Prognostic value and treatment. Arch Otolaryngol Head Neck Surg 2008; 134 (2): 170-7.
2. Urquhart A, Berg R. Hodgkin's and non-Hodgkin's lymphoma of the head and neck. Laryngoscope 2001; 111 (9): 1565-9.
3. Gunderson LL, Tepper JE, eds. Clinical Radiation Oncology. 2nd ed. Philadelphia: Elsevier Churchill Livingstone; 2007.
4. Myers LL, Nussenbaum B, Bradford CR, et al. Paranasal sinus malignancies: An 18-year single institution experience. Laryngoscope 2002; 112 (11): 1964-9.
5. Shlansky-Goldberg RD, Rao VM, Choi HY, et al. Hodgkin disease of the maxillary sinus. J Comput Assist Tomogr 1988; 12 (3): 507-9.
6. Peterson JL, Hayostek CJ et al. Hodgkin's lymphoma of the maxillary sinus: an unusual occurrence. Ear Nose Throat J. 2012 Jan; 91(1):E16-9.
7. Lello GE, Raubenheimer E. Hodgkin's disease presenting in the maxilla. A case report. Int J Oral Maxillofac Surg 1989; 18 (1): 7-9.

AUTHORS:

1. Rayakar Vinayak V
2. K. B. Chandrappa
3. K.P. Basavaraju

PARTICULARS OF CONTRIBUTORS:

1. Post Graduate, Department of ENT, JJM Medical College, Davangere.
2. Professor, Department of ENT, JJM Medical College, Davangere.
3. Professor, Department of ENT, JJM Medical College, Davangere.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Rayakar Vinayak V,
PG MS ENT,
JJM Medical College,
Davangere.
Email- vinkya1464@gmail.com

Date of Submission: 07/08/2013.
Date of Peer Review: 08/08/2013.
Date of Acceptance: 14/08/2013.
Date of Publishing: 22/08/2013