An Interesting Case of Hodgkin’s lymphoma

Ajmal M,1 Luqman M,2 Mustafa A,3 Bokhari K4

ABSTRACT

Introduction: Lymphomas are a group of malignant solid tumors involving cells of the lymphoreticular or immune system. Lymphomas are divided into two major categories: Hodgkin’s disease (HD) and non-Hodgkin’s lymphoma (NHL). The incidence is bimodal with the first peak in the third decade of life, and a second smaller peak after the age of 50 years. The etiology of HL is still unknown, but some factors include a positive family history, higher socioeconomic status, and prior EB virus infections.

Case Description: We present a case of Hodgkin’s lymphoma in a 52 year old male patient presenting with a swelling involving bilateral sub-mandibular region. Following incisional biopsy, Hodgkin’s lymphoma was diagnosed.

Conclusion: Combination of chemotherapy and radiotherapy is the treatment of choice in Hodgkin’s lymphoma.

Keywords: lymphoma, Hodgkin’s, malignant

Introduction

Lymphomas are a diverse group of neoplasm’s affecting the lymphoreticular system1. Lymphomas are divided into two major categories: Hodgkin’s disease (HD) and non-Hodgkin’s lymphoma (NHL). Hodgkin’s disease often presents as nodal disease, commonly involving cervical, axillary and inguinal nodes. Extra-nodal involvement is classically manifested by non Hodgkin’s lymphoma. Skeletal involvement in Hodgkin’s lymphoma is uncommon and seldom encountered at presentation2. The incidence is bimodal with the first peak in the third decade of life, and a second smaller peak after the age of 50 years. The etiology of HL is still known, but some factors include a positive family history and prior EB virus infections. Treatment decisions are based on the Ann Arbor classification supplemented by prognostic factors and pathology. A combination of chemotherapy and radiotherapy remains to be the treatment of choice in cases of Hodgkin’s lymphoma.

Case Description

A 52 year old patient reported to the Oral Diagnosis with a chief complaint of swelling on the left lower back region of the jaw. The swelling progressed to the present size over a period of one year. There was no characteristic pain or dysphagia but had lost nearly 30 Kg of his body weight in the last one year. On extra-oral examination, the swelling was diffused measuring around 3*3 centimeters primarily over the left buccal region and extending towards the submandibular region (figure 1). The contralateral (right side) submandibular region was also involved. The swelling also extended towards the anterior neck region which was evident by indistinct sternocleidomastoid region (figure 2). The lymph nodes were palpable on both sides of neck was stony hard in consistency. Intra-orally, there was obliteration of the buccal vestibule on the left pre-molar regions (figure 3). As the swelling involved the left sub-lingual space, there was elevation of tongue. Base on the clinical presentation and history, a provisional diagnosis of connective tissue malignancy was made.

Dental panoramic radiograph (Orthopantogram) showed saucer shaped resorption at the left lower border of the mandible near the angle (figure 4). CT scan showed a massive soft tissue lesion on both sides of neck more on left side with the lesional mass displacing pharyngeal wall (figure 5,6). Hemogram revealed total WBC count of 2000 cells. Incisional biopsy was performed intra- orally under local anesthesia and the report was suggestive of Hodgkin’s lymphoma with an atypical type of characteristic Reed Stenberg cells (figure 7). The patient was referred to Primary Cancer Center for further treatment. The patient failed to turn up for appointments in spite of repeated reminders. As such, we present this case without post-operative follow-up.
CASE REPORT

Figure 1: Extra-Oral Appearance

Figure 2: Neck Involvement

Figure 3: Intra-Oral View

Figure 4: Panaromic Radiograph

Figure 5: CT Scan

Figure 6: CT Scan
Discussion

Malignant lymphomas constitute a group of neoplastic proliferation of the lymphocytes and their precursor cells. Of the two variants of lymphoma, Hodgkin’s lymphoma is less common than the non-Hodgkin’s lymphoma. Multinucleated Reed-Sternberg cells are characteristic of Hodgkin’s lymphoma. Lymphomas show a male predominance with male to female ratio 3:2. Cardiac metastases are found in 20% to 25% of patients with lymphoma. Amirimoghaddam Z et al., presented a rare case of Hodgkin’s lymphoma causing heart failure and stated that the pericardium is mostly involved by lymphomas via lymphatic or hematogenous metastasis. Hodgkin’s lymphoma involves the CNS in 0.2% to 0.5% of cases by contiguous or hematogenous spread. In Hodgkin’s lymphoma, the most common site of bony involvement is the spine, and multiple lesions at presentation are more common than a solitary lesion. Bender Ignacio RA et al., reported a case of Hodgkin’s lymphoma mimicking vertebral osteomyelitis in a 52 year old Caucasian man. In the present case, since histopathological diagnosis was Hodgkin’s lymphoma, the site of origin was extranodal and not primarily mandible. According to Steinbacher DM and Dolan RW, only 0.6% of isolated malignant lymphomas are non-Hodgkin’s. Matsumoto N et al., reported a case of anaplastic large cell lymphoma in gingiva in a 76 year old Japanese woman and stated that malignant lymphomas are often found in the maxillofacial area and it is rare to have gingival enlargement as the first symptom. Lymphomas either Hodgkin’s or non Hodgkin’s variant should be carefully evaluated for systemic involvement, metastasis of distant organs like cardiac and CNS involvement. When these lesions primarily originate from bone, bony osteomyelitis, odontogenic infections must be carefully differentiated from lymphomas. In this case report, the patient had lost almost 30 kgs of weight over a period of one year thus stressing the fact that detailed case history is imperative in differentially diagnosis lymphomas from osteomyelitis and odontogenic infections. The optimal therapy to achieve the highest disease control rate is usually a combination of chemotherapy followed by field radiation in the affected area. An increased risk of a second malignancy has been well described among HL survivors. In the present case, the patient had primary Hodgkin’s lymphoma with secondary resorption at the angle of mandible and extensive involvement in the submandibular and sublingual soft tissue spaces extending up to cervical region. What remains uncertain is the pericardial and distant organ involvement as the patient failed to turn up after referral to the Cancer center for further evaluation and treatment.

References

About the Authors

1. Dr. Ajmal M
   Assistant Professor, Oral Medicine & Radiology, College of Dentistry, King Khalid University, Abha, Saudi Arabia

2. Dr. Luqman M
   Assistant Professor, Oral Pathology, College of Dentistry, King Khalid University, Abha, Saudi Arabia

3. Dr. Mustafa A
   Associate Professor, Oral Medicine & Maxillofacial Surgery, College of Dentistry, King Khalid University, Abha, Saudi Arabia

4. Dr. Bokhari K
   Assistant Professor, Oral & Maxillofacial Surgery, College of Dentistry, King Khalid University, Abha, Saudi Arabia

Address for correspondence:

Dr. Muhammed Ajmal,
Assistant Professor, Oral Medicine & Radiology, College of Dentistry, King Khalid University, Abha-3263, Saudi Arabia.

e-mail: drmajmal@gmail.com