Obstructive jaundice due to metastatic retroperitoneal lymphadenopathy of carcinoma base of tongue

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Case Report

Abstract

Squamous cell carcinomas of the base of the tongue are diagnosed often at advanced stages, especially in patients with a history of smoking and alcoholism. Metastasis of carcinoma of tongue has been described in liver, lung, bone, brain, skin, eye, soft tissue, skeletal muscle, and percutaneous endoscopic gastrostomy sites, other than cervical and axillary lymph nodes. Metastasis has also been reported after surgical treatment and radiotherapy. Obstructive jaundice in carcinoma tongue due to metastatic retroperitoneal lymph node has not been reported in literature. We report a case of obstructive jaundice due to retroperitoneal lymph node mass obstructing biliary system in a case of carcinoma base of tongue.

Keywords: Tongue Carcinoma; Metastasis; Retroperitoneal Lymph node; Obstructive Jaundice

Introduction

Approximately 20% of all squamous cell carcinomas (SCC) of the oral cavity arise from the tongue, and approximately 75% of all tongue SCCs arise from the anterior two thirds of the tongue.1 Carcinoma base of tongue (BOT) is an aggressive tumor with bad prognosis.2 Lymph node metastasis is common because of the rich lymphatic drainage of the base of the tongue. Approximately 70% or more of the patients have ipsilateral cervical nodal metastases; 30% or fewer of the patients have bilateral, cervical lymph–node metastases.3, 4 The cervical lymph nodes involved commonly include levels II, III, IV, V, and retropharyngeal lymph nodes. Besides cervical lymph node, axillary and retroperitoneal lymph nodes can be involved. Biliary tract involvement resulting from lymph nodal obstruction in carcinoma BOT has not been described in literature searched best to our knowledge. Here, we are reporting a case of obstructive jaundice resulting from compression of extra hepatic biliary tract by metastatic retroperitoneal lymph nodal mass in carcinoma BOT, one year after chemo-radiotherapy.

Case Presentation

A 55-year-old male, known case of moderately differentiated squamous cell carcinoma base of tongue (BOT) T2N0M0 received radiation therapy using Image Guided Radiation Therapy technique with the dose of 6900 cGy in 30 fractions and 6 cycles of chemotherapy with cisplatin one year back. The patient presented with painless progressive cholestatic jaundice with significant pruritus for 1 month. Physical examination including oral cavity inspection was normal except icterus. Clinical investigation showed hemoglobin of 11.4 g/dl, total leucocyte count of 6.08 × 10³/mm³, platelet count of 2.89 lakh/ml, total serum bilirubin of 16.8 mg/dl (direct 10.5 mg/dl), aspartate/alanine transaminase of 89/59 U/L, serum alkaline phosphatase of 525 U/L. Abdominal ultrasound (USG) revealed intrahepatic biliary radical dilatation (IHBBD), dilated common bile duct (CBD), space occupying lesion(SOL) of 50.5 × 55 mm in liver with mass around head of pancreas. Triple phase computed tomography (CT) ab-
demon showed SOL Liver (50 × 60 mm, segment 5) with central necrosis, no typical enhancement pattern, 43 × 36 mm lobulated heterogeneously enhancing peripancreatic lymph node (Figure 1) and lytic lesion in iliac bone. Magnetic resonance cholangiopancreatography revealed iHBRD, large soft tissue mass causing compression 2 cm below the confluence (Figure 2). USG guided fine needle aspiration cytology (FNAC) from SOL liver and endoscopic ultrasound guided FNAC from peripancreatic lymph node showed metastatic poorly differentiated carcinoma of squamous cell morphology. CT neck showed no evidence of residual disease at BOT. Patient underwent endoscopic retrograde cholangiopancreatography which showed a tight CBD stricture from lower end extending up to hilum and 8cm self-expandable metallic stent was placed. Patient discharged with referral for further chemotherapy.

FIG. 2: Magnetic resonance cholangiopancreatography showing narrowing of common bile duct 2 cm below confluence (arrow) with dilated proximal intrahepatic biliary radicals.

Discussion

The incidence of carcinoma of tongue, squamous cell variety, in India is second highest in the world. Incidence of carcinoma tongue in Delhi is 6.43% in males and 1.84% in females (cancer registry 2008-09). In males, it was third most common malignancy. In Mumbai, it was third common tobacco related cancer (TRC) (incidence of 16.4%). In females, it was second most common TRC in Thiruvananthapuram (cancer registry 2007-2011). Li et al. reported distant metastasis of carcinoma tongue post radiation and surgical therapy in spine, ribs, mandible, skeletal muscle of upper extremity as well as lymph nodes of mediastinum and lung. Alvarez Marcos et al. reported metastasis to lung in 58%, bone in 22%, liver in 9%, soft tissue in 9% and other sites in 9% in oral squamous cell carcinoma. Retroperitoneal lymph nodal mass causing CBD compression has been reported in carcinoma testis and in carcinoma gall bladder in advanced stage as well as in other gastrointestinal malignancies.

Lymph nodal metastasis at porta hepatitis can cause obstructive jaundice. The primary site of metastases to porta hepatitis is usually within the gastrointestinal tract. Carcinoma of the breast, lung, stomach, kidney, malignant melanoma, and lymphoid neoplasm can also cause extra hepatic biliary tree compression by lymphatic metastasis. Nonmalignant cause of lymphadenopathy at porta includes tuberculosis and cryptococcal lymphadenitis. Isolated porta lymph node without involvement of liver has been reported in metastatic colorectal cancer, but is extremely rare. Obstructive jaundice has also been reported in carcinoma ovary most probably from lymph nodal compression.

Head of pancreas carcinoma was excluded as there was no infiltration of nearby vessels, pancreatic duct was not dilated and mass was having well defined border. We confirmed our finding by FNAC from both the lesions, lymph nodal mass and SOL liver.

Conclusion

In the case discussed above, we showed the spreading of carcinoma base of tongue to retroperitoneal lymph node without presence of residual disease at primary site, simulating pancreatic mass on imaging. Clinically the patient presented with features of cholestatic jaundice. Therefore, carcinoma of tongue with retroperitoneal lymphadenopathy can rarely present as an extra hepatic biliary obstructive jaundice.

Conflict of interest

The authors declare that they have no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

References