Hepatocellular Carcinoma with Rare Clinical Presentation

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Abstract

The presentation of HCC has evolved significantly over the past few decades. Whereas in the past, HCC generally presented at an advanced stage with common presentation as right-upper-quadrant pain, weight loss, and signs of decompensated liver disease, it is now increasingly recognized at a much earlier stage as a consequence of the routine screening of patients with known cirrhosis. We presented 3 rare clinical presentations for patients with metastatic HCC, first one to the nasal alae which very rarely no reported cases as such, 2nd one to the parotid which also rare but there are few reported cases, and the 3rd one although spinal cord compression can occur with metastatic HCC but as first presentation with spinal cord compression is also rare.

Introduction

HepatoCellular (HCC) is now the third leading cause of cancer deaths worldwide, with over 500,000 people affected. The incidence of HCC is highest in Asia and Africa, where the endemic high prevalence of Hepatitis C (HCV) and Hepatitis B (HBV) strongly predisposes to the development of chronic liver disease and subsequent development of HCC. Recently recognized that a growing problem with cirrhosis, which develops in the setting of Non-Alcoholic Fatty Liver Disease (NAFLD), or Non-Alcoholic Steato Hepatitis (NASH). NASH typically develops in the setting of obesity, type 2 diabetes, dyslipidemia, and hypertension, and it will undoubtedly remain a significant problem, given the obesity epidemic [1-6].

The presentation of HCC has evolved significantly over the past few decades. Whereas in the past, HCC generally presented at an advanced stage with common presentation as right-upper-quadrant pain, weight loss, and signs of decomposition liver disease, it is now increasingly recognized at a much earlier stage as a consequence of the routine screening of patients with known cirrhosis. Hepatocellular carcinoma (HCC) is discovered when symptomatic because of their size or location or a symptomatic during screening for HCC. Tumors may present as a single mass lesion or as diffuse growth, which can be difficult to differentiate from the surrounding cirrhotic liver tissue and the regenerating liver nodules on imaging studies. The presentation may be caused in part by mass effect that can lead to obstruction of the biliary system or anywhere affecting the liver vasculature. In rare occasion it present with metastatic lesions outside the liver at an unusual site [7].

The frequent metastatic sites were lung (53.8%), bone (38.5%), and lymph node (33.8%). Other metastatic sites were the adrenal gland, peritoneum, skin, brain and muscle [8-10].

We present 3 cases of HCC who presented with very unusual clinical presentation at our National Center for Cancer care and Research (NCCCR).

Case Presentation 1

F R A is a 58 years old male patient known Diabetes Mellitus (DM), Hypertension (HTN)
on regular medication, presented on May 2014 to the dermatology department with a nodular dark color lesion on the left nasal alae, 
(Figure 1) with provisional clinical diagnosis of pyogenic granuloma, 
underwent excision on 4th June 2014 , the histopathology a nodular 
lesion covered by skin measuring 1.5 cm x 1.3 cm x 0.4 cm firm 
solid tan brown color, Biopsy from this lesion, Microscopically 
finding were a moderately differentiated metastatic carcinoma, 
Immunohistochemistry (IHC) p for revealed AE1/3 HePar1, 
Arginase, CD10, CEA polyclonal and CD138 positive , CK 20. 
while negative for TTF1, Vementin, CK20, CK7, P63, CK3BE12, 
HMB45, Synaptophysin, S-100, Mela-A, Inhibin, PSA, CK19, alfa-1-
Fetoprotein and RCC. IHC favor metastatic moderately differentiated 
hepatocellular carcinoma .The liver lesion biopsy microscopically 
showed distorted.

Work up for the primary, liver function test and CBC were 
normal hepatitis serology for B, C were negative, AFP was 2 IU/l, 
CEA 3.6, CA19.9:13. PET SCAN, showed only small 1cm nodule 
with intense FDG-uptake at the lower part of the nasal septum on 
the right nasal cavity. MRI SCAN showed a large and solid mass lesion 
in the right lobe of liver with typical radiological criteria of HCC (Arterial enhancement and 
venous wash out), and destructive bony lesion involving the right 
mandibular bone angle 5 cm x 7 cm in diameter. Biopsy (Figure 4A 
and 4B) from the mandibular lesion, Metastatic HCC into the parotid 
gland , IHC positive for CK18 , HePar 1 and canalicular pattern 
staining for pCEA. Patient received radiotherapy to parotid lesion 
and TACE to the liver lesion, but progressed after 3 months shifted to 
palliative care, and expired 2 months later.

Case Presentation 2

A 66 years old Sudanese mal patient know alcoholic for long time, 
presented on April 2011 with swelling of the right side of the face of 
4 weeks duration associated with abdominal distension, the physical 
examination revealed a 7 cm swelling at the right parotid area no skin 
color changes is firm in consistency mild tenderness no fluctuation, 
no other swelling in the neck, abdominal examination revealed 
ascites and splenomegaly. His lab test showed low albumin, anemia 
and thombocytopenia bilirubin 27 mmol /l child Pugh assessment 
C, AFP 3250IU/.

CT scan Figure 4 revealed big mass lesion in the right lobe of liver 
with typical radiological criteria of HCC (Arterial enhancement and 
venous wash out), and destructive bony lesion involving the right 
mandibular bone angle 5 cm x 7 cm in diameter. Biopsy (Figure 4A 
and 4B) from the mandibular lesion, Metastatic HCC into the parotid 
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A 59 years old male patient who is known to have Diabetes mellitus and hypertension on regular medication and HCV +ve treated with antiviral on 2006 presented on July 2014 with pain in both shoulder and backache found to have destructive bone lesion in D7 and L 1 by CT scan (Figure 5) chest abdomen in addition to a lesion in the right lobe of the liver with arterial enhancement and venous wash out, he had surgery for the spinal cord compression with fixation of the vertebra, the pathology revealed poorly differentiated adenocarcinoma consistent with HCC (Figure 6). The surgery followed by radiotherapy to the spine and right hip metastatic lesion finished September, 2014. Biopsy of the liver lesion consistent with HCC. He developed symptom of double vision, numbness with positive other neurological symptoms and signs. MRI showed space occupying lesion in the temporal lobe with meningeal metastasis. Patient was treated with high dose dextamethasone, had hard course of worsening and deterioration during hospital stay. He was maintained on supportive care expired on May 2015.

Discussion

Hepatocellular carcinoma is the 5th most common cancer in men and the 2nd most common cause of death from cancer worldwide. In various cancers breast and prostate carcinomas are the most prone to developing bone metastases, followed by lung carcinoma, colorectal cancer, thyroid carcinoma and renal carcinoma. Common sites for extra hepatic metastases are the lung, regional lymph nodes, adrenal gland, bones, brain and peritoneum [11,12]. Very few cases of usual site for metastasis in HCC is uncommon, metastasis to the nasal alae or the parotid gland are reported in the literatures. Incidence of HCC metastasis is rare 1.6% to 16%, of which 5% to 7% of the cases present with bone metastases as the initial lesions. By contrast, for bone metastasis, the axial skeleton is the most common metastatic site, with the vertebrae being the most frequently involved tissues (~37% of cases), followed by the ribs, sternum and pelvis [12]. Compared with these sites, parotid mandibular metastases from HCC are rather rare, particularly when they occur with symptoms. The first mechanism involves the hepatic artery and the portal vein. When tumor tissues affect these vessels, metastatic dissemination would reach the lung first and then the maxillofacial area. Alternatively, it has been postulated that there may be a connection between the azygos or hemiazygos veins and the vertebral venous plexus (Batson’s plexus), which creates another route for hematogenous spread. There would consequently be free communication between the neck, thorax, abdomen and pelvis venous systems, and the non- valve vertebral venous plexus, which extends from the cranial base to the coccyx. Any increase in the intra-abdominal pressure can result in an ascendant flow through the vertebral venous plexus. In such cases, HCC cells could reach the maxillofacial territory through these hematogenous routes and metastasize into the mandible [7,13].

Spinal cord compression secondary to metastatic disease as a first presentation is uncommon. Patient presenting primarily with the symptom of weakness in lower limb corresponding to spinal metastases sites rather than symptoms of associated hepatic pathology and eventually developed SCC [14].

Clinician should always keep in mind the possibility of extra hepatic metastases and the clinical features of extra hepatic metastases should be considered when examining patients with HCC, particularly those with advanced intra hepatic tumors, to enable precise evaluation of the spread of HCC and determination of the appropriate treatment method.

Conclusion

Extra hepatic metastases of HCC are not rare. The possibility of extra hepatic metastases and the clinical features of extra hepatic metastases should be considered when examining patients with HCC. Rare unusual site should be kept in mind when examining patient suspected HCC.

References


