AFRICAN JOURNAL OF MEDICINE and medical sciences

VOLUME 35 NUMBER 2 JUNE 2006

ISSN 1116—4077

Afr. J Med. med. Sci. (2006) 35. 181-182

Cutaneous metastasis from hepatocellular carcinoma: a rare presentation and review of the literature

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Summary

A 53-year-old male Nigerian with a rare cutaneous metastasis and a late manifestation of hepatocellular carcinoma is presented. The skin nodules were umbilicated, painless, firm and spread on the chest, abdomen and back. Ultrasonography showed a huge mass in the right lobe of the liver. Fine needle aspiration cytology of the liver revealed hepatocellular carcinoma and the skin nodule, metastatic carcinoma of hepatic origin. The immunological marker HBsAg was positive while Anti-HCV Ab and alpha-fetoprotein were negative. Patient died and consent for post-mortem examination was refused.

Key words: *Cutaneous metastasis; hepatocellular carcinoma, HBsAg.*

Résumé

Cet abstrait présente le cas d'un jeune homme Nigérian de 53 ans avec un métastasie cutanée rare et les manifestations tardives de carcinome hépatocellulaire. Les nodes de la peau étaient sans douleur, roulés, épais et étendus de la poitrine, a l'abdomen et au dos.L'ultrasonographie montrait une masse dans le lobe droite du foi. L'examination de l'aspiration cytologique a l'aiguille fine du foi revelait le carcinome hépatocellulaire et le nodule de la peau, une métastasie d'origine hépatique. Le marqueur immunologique HBsAG était teste positif alors que l'Anti-HCV Ab et alpha-fetoprotein étaient négative. Le patient mourrait et le consentement d'examination post mortel était refusé.

Introduction

Cutaneous metastasis from hepatocellular carcinomas is rare [1]and its diagnosis may be difficult on histological ground [2]. Hepatocellular carcinoma is common in our environment but cutaneous manifestation is unusual. There is also paucity of literature in our environment as regard to this presentation. We therefore present this patient to highlight a rare and uncommon cutaneous metastasis from hepatocellular carcinoma and the role of fine needle aspiration cytology in the diagnosis of hepatic lesions.

Case history

Mr. T.A.A. was a 53-year-old man with a one-month history of right hypochondrial pain and cutaneous nodular masses on the body. The right hypochondrial pain was associated with dragging sensation in that area, easy satiety and poor appetite. The cutaneous nodular masses involved the head, chest, abdomen and the limbs. There was past and present medical history of intake of traditional herbal concoctions exclusive of alcohol. He was never jaundiced or transfused with blood.

Examination on admission revealed an ill looking middle-aged man, conscious and well oriented, wasted, pale, anicteric with bilateral inguinal lymphadenopathy. He had cutaneous nodular masses involving the scalp, chest, abdomen and limbs. These were freely mobile and neither attached to the skin nor underlying structures. They measured about 0.5 x 0.5cm, firm, not tender (Fig. 1). He had finger clubbing. He had hepatomegaly 7cm palpable below the costal margin with a span of 15cm. It was tender, hard, and nodular with a blunt edge. Spleen and Kidneys were not palpable. Other systems were normal. A clinical diagnosis of hepatocellular carcinoma was made.

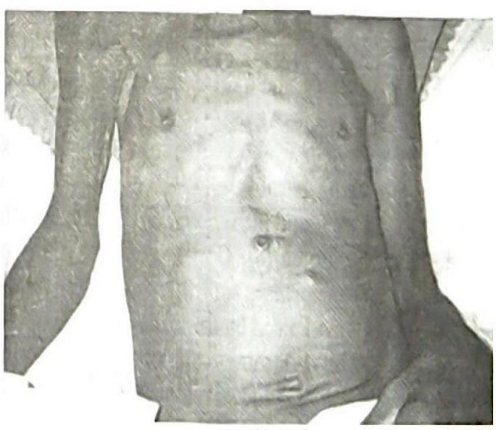

Fig. 1: Photograph of a 53-year-old man showing multiple cutaneos metastasis on the abdomen from hepatocellular carcinoma

Abdominal ultrasound scans showed an enlarged liver with a huge mass in the right lobe with distortion of its architecture. The HBsAg was positive while anti-HCV Ab and alpha-fetoprotein were negative. Chest roentgenogram was clear.

The Prothrombin Time was deranged. Test 30secs, control 16secs. Full Blood Count showed a Pack Cell Volume of 0.29, White Blood Count 11.9x10⁹/L, Neutrophils-78%, Eosinophils-2%, Lymphocytes-20%. Erythrocyte Sedi-

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mentation Rate-100mm/hr (Westerngren method). The patient was managed conservatively with intravenous fluids, analgesic and antibiotics. A fine needle aspiration cytology of the nodules showed abundant malignant hepatocytes consistent with metastatic hepatocellular carcinoma.

On the 8th day of admission, the patient developed laboured breathing. There was no fever but chest examination revealed coarse crepitations in the left mammary axillary and bilateral interscapular areas. He was started on amoxycillin/clavulanic acid and intravenous fluids. He died after a week of admission. Consent for postmortem examination was refused.

Discussion

Cutaneous metastases are rare and uncommon manifestations of hepatocellular carcinoma. When seen the skin metastasis is usually a late manifestation of the primary tumour [3]. Our patient presented with right hypochondrial pain with skin lesions, which were diagnosed by fine needle aspiration cytology as metastasizing Hepatocellular carcinoma although FNAC of the Liver is not the Gold standard for the diagnosis. The patient was too ill for a liver tissue biopsy procedure. Positivity of the immunological marker, HBsAg is strongly associated with Hepatocellular carcinoma. The development of Hepatocellular carcinoma is the most important consequence of chronic BHV infection and hepatocellular is one of the major causes of deaths from malignancies worldwide [4]. Published data have consistently indicated that integration of HBV-DNA into the hepatocyte genome precedes development of Hepatocellular carcinoma by months or years [4.5]. A study from Nigeria by Baba *et al* [6] in Maiduguri and Ndububa *et al* [7] in Ile-Ife found 50% and 61% of hepatocellular carcinoma in patients with HbsAg positivity respectively. However, Alpha-fetoprotein was negative in our patient and that is not surprising because elevated levels of serum alpha-fetoprotein are found in 50% to 75% of patients with Hepatocellular carcinoma [8]. Gorusu *et al* [9] reported patient pulmonary metastases from Hepatocellular carcinoma that was not evidenced by ultrasonography and alpha fetoprotein. The differential diagnoses of the skin nodules include fibromas, adnexal tumours and inflammatory granuloma. In patient with hepatocellular carcinoma presenting with skin nodules anywhere on the body, metastasis should be highly suspected. Kubota *et al* [11] reported a case of hepatocellular carcinoma resembling pyogenic granuloma on the chin. Fang *et al* [1] also reported detailed case of multiple skin metastases from an adult with surgically resected hepatocellular carcinoma.

The role of FNAC, ultrasonography and immunological marker HBsAg positivity has gone a long way in documenting this case of cutaneous metastasis from hepatocellular carcinoma.

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Received: 11/01/05
Accepted: 21/06/06