Leser-Trelat sign with primary hepatic carcinoma

Sir,

A 62-year-old male presented with a 3-year history of a brown patch on his face. Around the same time, several asymptomatic 1-2 cm sized brown spots began to appear on his checks. These were diagnosed as "age spots" at a local hospital and left untreated. One year ago, the number and the size of the lesions increased significantly and they gradually extended to the entire face, neck, chest, back and limbs. Though the lesions themselves continued to remain asymptomatic, he experienced right upper abdominal discomfort, fatigue, and weight loss (4 kg). His past medical history and family history were unremarkable.

General examination was unremarkable. Skin examination revealed numerous gray and brown, round to oval shaped, well-demarcated flat patches of variable sizes with a smooth surface, predominantly on the face, neck, and trunk, with a few similar lesions scattered on the limbs [Figure 1a-c]. Some lesions were covered by light to dark brown crusts.

A skin biopsy taken from one of the lesions on the back showed hyperkeratosis, acanthosis, and papillomatosis, consistent with seborrheic keratosis [Figure 2a]. Investigations revealed the following: red blood cell count 3.4 × 10^9/l, hemoglobin 85 g/l, platelet count: 11.3 × 10^9/l, alanine transaminase 125 U/l, aspartate transaminase 541 U/l, alpha-feto protein 50 ng/dl, and negative HBsAg and anti-Hbe. Abdominal ultrasound demostrated several intrahepatic space occupying lesions. Magnetic resonance imaging (MRI) demonstrated an uneven hepatic surface, with a 5.9 × 5.7 cm, oval, well-defined hypointense mass in the right lobe; contrast-enhanced MRI showed an obvious non-homogeneous enhancement of the tumor in the arterial phase, washout of tumor in the portal venous phase and delayed phase, a low signal intensity of the mass compared to the increased signal intensity of the surrounding hepatic parenchyma, and multiple similar rounded nodules in the left and right lobes.

A biopsy of one of the hepatic tumour nodules demonstrated well differentiated hepatocytes containing bile pigment in the cytoplasm. The hepatocellular plates/cords were more than 2–3 cells thick, with a large number of cells showing nuclear atypia and enlarged nuclei [Figure 2b]. The pathologic diagnosis was primary hepatic carcinoma.

The patient was treated by surgery. At 6-month follow-up, the lesions of seborrheic keratoses stopped progressing, but did not regress.

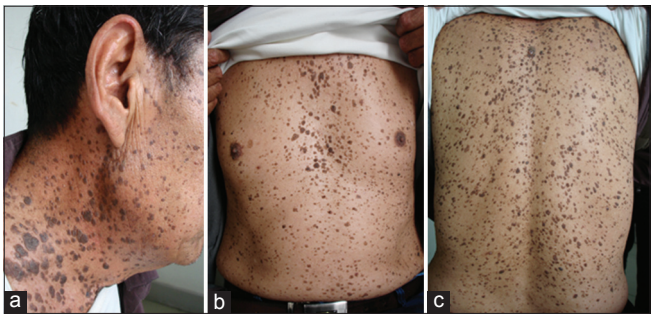

Figure 1: Multiple eruptive seborrheic keratoses on the (a) face and neck, (b) breast, and (c) back

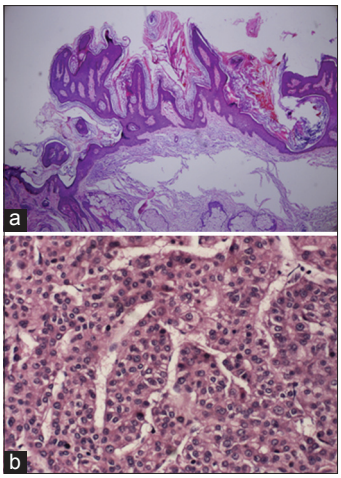

Figure 2: (a) Skin biopsy taken from the lesion on the back showed pronounced hyperkeratosis and papillomatosis together with slight acanthosis (H and E x40). (b) Hepatic histopathological examination showed a large number of cells with nuclear atypia and enlarged nuclei (H and E x200)

Leser–Trelat sign is defined as the association of the acute onset and/or rapid increase in the size and number of multiple seborrheic keratoses, with an underlying internal malignancy. Skin lesions of the Leser–Trelat sign are most often observed on the back and chest, followed by the extremities, face, and abdomen.[1] Common cancer entities associated with the Leser–Trelat sign include gastrointestinal adenocarcinomas, lymphoproliferative disorders,[2,3] neoplasias of the breast, lung, urinary tract,[4] and ovarian cancer.[5] Leser–Trelat sign associated with hepatic carcinoma appears to be quite rare. Harrington[6] reported a 72-year-old man with Leser–Trelat sign associated with malignant hepatoma. Tajima[7] reported another case of a 57-year-old man who developed hepatocellular carcinoma and found the patient's seborrhoeic keratoses erupted with the relapse of hepatocellular carcinoma, 1 year after intiial surgery.

Curth's criteria developed by Helen Curth are particularly helpful to assess the relationship between unusual dermatoses and underlying malignancy.[8] According to the criteria, (1) the dermatosis is relatively uncommon; (2) it occurs with a specific neoplasm; (3) the two conditions are frequently observed together; (4) the onset is concurrent; (5) the condition takes a parallel course; and (6) the condition is not recognized as a part of a genetic syndrome.[8-10] Leser–Trelat sign is a relatively rare clinical condition found to be associated with internal malignancies. The skin lesions in our patient increased rapidly with the development of the underlying hepatic carcinoma and stopped increasing after the operation and thus satisfied some of Curth's criteria.

Even though Leser–Trelat sign is rare, we recommend a comprehensive internal examination including that of the liver when patients present with multiple, rapidly evolving seborrhoeic keratoses

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