Case Report

Pancreatic Carcinoma Associated with the Leser-Trélat Sign

Naoki Ohashi* and Naoaki Hidaka

1Department of Surgery, Matsusaka Chuo Hospital, Matsusaka, Mie, Japan; 2Department of Surgery, National Tsu Hospital, Hisai, Mie, Japan

Summary

A case of pancreatic carcinoma associated with the Leser-Trélat sign is reported. A 53-yr-old male had complained of mild epigastric discomfort and back pain accompanied by seborrheic keratoses, which had increased in size and number over the previous 6 mo. A tumor was detected in the head of the pancreas and macroscopically curatively resected. His skin lesions diminished after surgery, but progressed again when the tumor recurred. Immunohistology for EGF showed a low level in the pancreatic carcinoma cells but a higher EGF content was recognized in the hyperkeratinized portions of the seborrheic keratoses. Of 130 underlying malignancies described in the 125 reported patients with the Leser-Trélat sign, neoplasms of the gastrointestinal tract were most common, comprising 47.7% of the total. The present case is the third case showing an association between a pancreatic carcinoma and the Leser-Trélat sign, but the first case for which the tumor of the pancreas was diagnosed in an early stage and resected surgically, as a result of the suggestive nature of this sign.

Key Words: Leser-Trélat sign; carcinoma of the pancreas; epidermal growth factor.

Introduction

Although the Leser-Trélat sign is rare, it is considered an important diagnostic skin finding, suggesting the presence of an underlying malignancy. It is defined as the sudden appearance and rapid increase in size and number of seborrheic keratoses (1). Although many kinds of internal malignancies have been reported in association with this syndrome, with a large proportion in the gastrointestinal tract, relatively few cases have involved the pancreas as the primary site. Here we present one such case and review the reports of this case in the literature concerning individuals with the Leser-Trélat sign and accompanying malignancies.

Case Report

A 53-yr-old male was admitted to Tsu National Hospital on January 17, 1991, with complaints of epigastric discomfort and back pain of 1-yr duration. He had noticed the appearance of senile verrucae over a period of 3 yr, but they had suddenly increased in size and number over the past 6 mo. Physical examination showed no anemia or icterus, but a hard, tender mass measuring 3 cm in diameter was palpable below the right costal margin. Numerous painless brown papules were observed on the chest,
abdomen, and upper back. Skin biopsies revealed seborrheic keratoses showing hyperkeratosis with keratin pearls. Laboratory data were normal, except for a decrease in the pancreatic function (Bentiromide) test to 48.8% and elevation of CA19-9 to 109 U/mL. Abdominal ultrasound (US) showed dilatation of the main pancreatic duct (MPD) in the distal pancreas and a hypoechoic mass in the head of the pancreas. Computed tomography (CT) also demonstrated dilatation of the MPD and a low-density mass in the lower portion of the head of the pancreas (Fig. 1A). Endoscopic retrograde pancreatography (ERP) revealed stenosis of a 1.5 cm segment of the MPD in the head of the pancreas (Fig. 1B). Digital subtraction angiography (DSA) of the superior mesenteric artery showed encasement of the root of the inferior pancreaticoduodenal artery, and both the pancreatic branches and the duodenal branches were deviated. At surgery, a tumor was found in the head of the pancreas, with direct invasion of the retroperitoneum and associated lymph node enlargement. Pancreatoduodenectomy was performed uneventfully. Histological examination showed the tumor to be a moderately differentiated adenocarcinoma (Fig. 2) with metastasis to peripancreatic lymph nodes. Immunohistochemical staining for epidermal growth factor (EGF) showed low levels in the carcinoma cells in the pancreas. More abundant EGF was recognized in the hyperkeratinized portion of seborrheic keratosis than in the pancreatic tumor (Fig. 3). Postoperatively, the patient was treated with external radiation therapy using $^{50}$Co, 5000 rad, and combined