

Case Report

Tripe palm: a paraneoplastic manifestation of carcinoma stomach

Arun P.^{1*}, Gireesh G. N.¹, Jinsha K. A.¹, Vani Jayaraj²

¹Department of Medical Gastroenterology, Madras Medical College, Chennai, Tamil Nadu, India

²Department of Pathology, Primex Slans'd Labs, Chennai, Tamil Nadu, India

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***Correspondence:**

Dr. Arun P.,

E-mail: arunvani9496@gmail.com

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ABSTRACT

Usually gastrointestinal malignancies present with low SAAG ascites. But when there is diffuse liver infiltration following malignancy, high SAAG ascites can occur. So liver infiltration can masquerade as cirrhosis. Malignant acanthosis and tripe palm are the paraneoplastic manifestations seen in GI malignancies. We are reporting a case which was initially managed as a straightforward case of cirrhosis, but later turned out to be a case with tripe palms, malignant acanthosis and carcinoma stomach as primary with diffuse liver infiltration having high SAAG ascites.

Keywords: Carcinoma stomach, Malignant acanthosis, Tripe palm

INTRODUCTION

The serum to ascites albumin gradient identifies the presence of portal hypertension and is helpful than protein based exudate/transudate concept.¹ Presence of a gradient ≥ 1.1 indicate that patient has portal hypertension.¹ Usually cirrhosis with portal hypertension can produce high SAAG ascites. But diffuse liver infiltration secondary to malignancy can produce a similar clinical scenario.

Acanthosis nigricans is characterized by velvety, hyperkeratotic plaques that predominantly appear on the flexural aspect of the neck, axillae, and groin. Usual associations being benign conditions such as obesity, insulin resistance. Rarely it is associated with malignancies, especially adenocarcinoma, of which, 55% to 61% are gastric adenocarcinoma.² Gross and eruptive itchy acanthosis nigricans with florid cutaneous papillomatosis and tripe palm are the features typical of

malignant acanthosis.³ Malignant acanthosis is characterised by rapid spread and intense pruritus.⁴ It has got a predilection to extremities, such as back of hand and wrist.

CASE REPORT

A 48 year old gentleman presented to our Emergency department with complaints of recurrent episodes of vomiting, diffuse abdominal pain, extensive hyperpigmentation over a period of 5 months. History of abdominal distension and pedal oedema since 3 months. Recently detected diabetic on treatment with glimiperide. He used to consume 2 units of brandy/day for last 5 years.

On physical examination, patient was sick looking and appeared pale. Diffuse hyperpigmentation, with velvety appearance of palms were present (Figure 1). Abdomen was non tender, distended with evidence of shifting

dullness. Coarse firm liver with irregular borders was palpable 3 cm below costal margin. Generalised hyperpigmentation of face with intense itching was present (Figure 2).



Figure 1: Tripe palm.



Figure 2: Malignant acanthosis.

A provisional diagnosis of chronic liver disease was made and patient was treated symptomatically. Meanwhile he was investigated for etiology of liver disease. Investigations revealed anaemia 9.9 gm/dl, total count- 7700/mm³, erythrocyte sedimentation rate-77 mm/hr. RBS-201 mg%, serum bilirubin- total-1.2 mg%, SGOT-200 u/L, SGPT-203 u/L, ALP-404 u/L, total albumin-3.3 gm%. Renal function test was within normal limits. Ascitic tap revealed high SAAG ascites and cytology negative for malignant cells. Ascitic fluid ADA was 4.5 u/l. Total count was 150, which was polymorph predominant. USG abdomen showed hepatomegaly with heterogenous echotexture and portal vein of 13 mm. Workup for haemochromatosis came as negative. OGDSCOPY was done and an ulceroproliferative growth in the antropyloric area was noted and biopsy came as well differentiated adenocarcinoma. Dermatology opinion

was sought and diagnosis of malignant acanthosis with tripe palms was put forward. Carcinoembryonic antigen value was high (17.18 ng/ml). Contrast enhanced CT scan of abdomen was done and showed inhomogenous hepatic parenchymal enhancement with diffuse ascites with increased wall thickness of antropyloric area of stomach. Liver biopsy cannot be done due to elevated prothrombin time and ascites and inaccessibility to transjugular liver biopsy equipments. So we proceeded with liver FNAC which revealed poorly differentiated carcinoma. So, clinical diagnosis of carcinoma stomach with liver infiltration was made. In spite of all the treatments, patient succumbed to the illness.

DISCUSSION

Colonic, gastric, breast, pancreatic and lung malignancies can cause peritoneal carcinomatosis and/or multiple liver metastases, which leads to ascites either because they compress portal veins or by causing liver failure. The serum-to-ascites albumin gradient (SAAG) identifies the presence of portal hypertension and is more useful than the older protein-based exudate/transudate concept for identifying portal hypertension¹.

Only about two-thirds of patients with malignancy-related ascites will have peritoneal carcinomatosis.⁵ Patients with Hepatocellular carcinoma complicating cirrhosis and those with massive liver metastases almost always (94%) have a SAAG ≥ 1.1 g/dL.⁵ Ascitic fluid total count can get elevated in patients with peritoneal carcinomatosis, massive liver metastasis. Our patient is having massive liver infiltration with high SAAG ascites.

The cutaneous paraneoplastic syndromes are a spectrum of skin disease caused by malignancy, but occurring at a site away from the primary metastasis site.⁶ The common paraneoplastic skin manifestations include tripe palm, malignant acanthosis nigricans, florid cutaneous papilomatosis. Our patient was having tripe palm with malignant acanthosis. Tripe palm is an extremely rare paraneoplastic skin condition, seen especially in carcinoma stomach.

Paraneoplastic skin manifestations usually occur before the other gastrointestinal manifestations develop.⁷ The exact pathophysiological mechanism of the paraneoplastic skin manifestation has not been well defined, but it could be related to cancer by-products. Transforming growth factor alpha, structurally related to epidermal growth factor (EGF), can be considered as possible causative agent.⁸ Other skin lesions associated with carcinoma stomach are dermatomyositis, multiple seborrheic keratoses. Leser-Trélat syndrome (LTS) is an eruptive appearance of, or at least a sudden increase in, the number or size of multiple seborrheic keratoses in association with an internal malignancy.⁹⁻¹⁰ Paraneoplastic pemphigus (PNP) is an autoimmune bullous disease characterized by the production of

various autoantibodies against plakin proteins in keratinocytes.¹¹

CONCLUSION

Tripe palm is a very rare paraneoplastic manifestation of gastrointestinal malignancy. From simple general examination, we can arrive at the conclusion of internal gastrointestinal manifestation.

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REFERENCES

1. Runyon BA, Montano AA, Akriviadis EA, Antillon MR, Irving MA, McHutchison JG. The serum-ascites albumin gradient is superior to the exudate-transudate concept in the differential diagnosis of ascites. *Ann Intern Med.* 1992;117(3):215-20.
2. Rogers DL. Acanthosis nigricans. *Semin Dermatol.* 1991 Sep;10(3):160-3.
3. Kamińska-Winciorek G, Brzezińska-Wcisło L, Lis-Święty A, Krauze E. Paraneoplastic type of acanthosis nigricans in patient with hepatocellular carcinoma. *Adv Med Sci.* 2007 Jan 1;52.
4. Schwartz RA. Acanthosis nigricans. *J Am Academy Dermatol.* 1994 Jul 1;31(1):1-9.
5. Runyon BA, Hoefs JC, Morgan TR. Ascitic fluid analysis in malignancy-related ascites. *Hepatology.* 1988;8(5):1104.
6. Chandiramani M, Joynson C, Panchal R, et al: Dermatomyositis as a paraneo-plastic syndrome in carcinoma of uterine origin. *Clin Oncol.* 2006;18(9):641-8.
7. Nishidoi H, Koga S, Kanbe N. Gastrointestinal carcinoma with skin diseases from the standpoint of surgery. *Gan to Kagaku Ryoho. Cancer Hemother.* 1988 Apr;15(4 Pt 2-3):1560-3.
8. Pentenero M, Carozzo M, Pagano M, Gandolfo S. Oral acanthosis nigricans, tripe palms and sign of Leser-Trélat in a patient with gastric adenocarcinoma. *Int J Dermatol.* 2004;43(7):530-2.
9. Dourmishev LA, Draganov PV. Paraneoplastic dermatological manifestation of gastrointestinal malignancies. *World J Gastroenterol.* 2009;15(35):4372-9.
10. Schwartz RA, Helmold ME, Janniger CK, Gascon P. Sign of Leser-Trélat with a metastatic mucinous adenocarcinoma. *Cutis.* 1991;47:258-60.
11. Anhalt GJ. Paraneoplastic pemphigus. *J Investig Dermatol Symp Proc.* 2004;9(1):29-33.

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