

A rare case of malignant acanthosis nigricans in a lady with ovarian cancer

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ABSTRACT

“Tripe palms” or pachydermatoglyphy is a descriptive term of acanthosis nigricans of the palms and is associated with internal malignancy. It often precedes the diagnosis of a new or recurrent tumor. Malignant acanthosis nigricans is most commonly associated with intra-abdominal malignancies. In patients with both tripe palms and acanthosis nigricans, gastric carcinoma is the most common followed by lung carcinoma. There are very few reports in the literature of malignant acanthosis nigricans associated with gynecological malignancies. We report this case because of its rarity. A 47-year-old lady presented with lower abdominal swelling and progressive hyperpigmentation which preceded the abdominal swelling by 6 months. On investigations, she was found to have ovarian cancer. The presence of acanthosis nigricans in conjunction with tripe palms in a female patient is highly suggestive of an internal malignancy including an ovarian cancer and demands an extensive search for the hidden ovarian cancer.

Key words: Malignant acanthosis nigricans, ovarian cancer, tripe palms

INTRODUCTION

Acanthosis nigricans is classified into benign and malignant forms on the basis of clinical associations. It is a cutaneous marker, most commonly of insulin resistance and less frequently of genetic disorders and malignancy. Acanthosis nigricans (AN) can be benign, associated with endocrinopathies or obesity, or drug induced.^[1] Malignant AN presents with diffuse hyperpigmentation of the face, flexures, and the oral cavity. It is considered to be a paraneoplastic manifestation of adenocarcinoma of the gastrointestinal tract (GIT).^[2] The other malignancies associated with malignant AN are of the bladder, kidney, thyroid, bile duct, bronchus, and rarely lymphomas.^[3] Acanthosis nigricans may precede, occur simultaneously with, or develop after the clinical onset of malignancy.^[4,5] Tripe palms is characterized by diffuse hyperpigmentation, increased rugosity, and hyperkeratosis of the palms. Here we report a case of malignant acanthosis nigricans with tripe palms in a lady with ovarian carcinoma. Malignant acanthosis nigricans in association with ovarian malignancy is a rare presentation.

CASE REPORT

A 47-year-old woman presented with progressive hyperpigmentation and hyperkeratosis of 14 months duration spreading from her face to the whole body [Figure 1]. She had a lower abdominal swelling which started 8 months back and on examination the mass was hard in consistency and arose from a pelvic organ. There were systemic symptoms of fatigue, weight loss, and night sweats over a period of 8 months. Investigations carried out by the oncologist revealed iron deficiency anemia (Hb 9.6 gm%, MCV 78 fl), an elevated alkaline phosphatase and reversal of albumin/globulin ratio in the liver function test. Her renal function test was within normal limits. Ultrasound-guided FNAC was done and cytopathology was suggestive of adenocarcinoma. Ultrasound examination of the abdomen showed a solid and cystic left ovarian mass, probably neoplastic. Spiral CT scan revealed a left ovarian complex cystic-solid mass suggestive of neoplastic mass [Figure 2]. Carcinoembryonic antigen levels were 35 times the normal value (1041 U/ml). Chest X ray was within normal limits. Total abdominal hysterectomy with bilateral salpingo-oophorectomy was planned and she

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was referred to the dermatology department for an opinion before surgery as they wanted to exclude any skin infection and as a part of pre-operative work up. Staging of ovarian carcinoma

according to FIGO in our patient was stage IIIa and this staging is done after surgery. Chemotherapy was planned post-surgery. Physical examination also revealed hyperpigmented velvety plaques on her neck, axillae, abdomen, umbilicus and groins, and coarse-thickened palms and soles [Figures 3-5].



Figure 1: Malignant acanthosis nigricans of the face



Figure 3: Tripe palms



Figure 2: CT scan of the abdomen showing a left tubo-ovarian mass suggestive of a neoplastic mass



Figure 4: Malignant acanthosis nigricans on the nape of the neck and upper back



Figure 5: Malignant acanthosis nigricans on the dorsum of the foot and the lower one-third of the leg

DISCUSSION

Malignant acanthosis nigricans (MAN) is a cutaneous eruption characterized by symmetric hyperpigmented hyperkeratosis, dermal papillomatosis, and mucosal involvement.^[9] The most commonly involved locations are the axillae, neck, external genitalia, groin, face, inner thighs, perianal area, and antecubital and popliteal fossa. MAN often accompanies tripe palms characterized by velvety thickening of the palms and exaggeration of the palmar ridges. As supported by many cases in the literature, the progressive form of acanthosis nigricans has been considered as a paraneoplastic dermatosis of intra-abdominal malignancies along with tripe palms.^[6,7] In comparison to intra-abdominal malignancies, MAN in conjunction with extra-abdominal malignancies, especially gynecological malignancies, is relatively rare. Literature reports six cases of endometrial carcinoma,^[8,9] one case of squamous cell carcinoma of the cervix, three cases of ovarian cancer,^[10-12] and one case of uterine cancer have been reported to occur in conjunction with MAN. Early detection of ovarian cancer increases possibilities of successful treatment and survival rate.

MAN can provide a clue to an early detection of ovarian cancers. Indeed, it has often been reported as the first sign of a malignancy that was discovered several months later. Malignant acanthosis nigricans may improve with treatment

of the underlying malignancy. Patients who present with tripe palms may need to undergo workup to search for underlying malignancy. The patient should be subjected to hematological investigations like complete blood count, liver and renal function tests, chest X ray, bronchoscopy, oesophagoduodenoscopy, ultrasound abdomen, and CT scan of abdomen and chest to exclude gastric and lung carcinoma. Tumor markers may be performed whenever necessary.

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