Acanthosis nigricans in an HIV seropositive: Is there a correlation?

Sir,

Acanthosis nigricans is a cutaneous disorder of hyperpigmentation and papillomatosis that may precede or coincide with a variety of benign, familial or malignant disorders. Acanthosis nigricans is characterized by hyperkeratosis and pigmentation and the affected skin is covered by papillomatous elevations, which gives it a velvety texture.[1] The etiopathogenesis of acanthosis nigricans is diverse and includes endocrinal as well as metabolic abnormalities. It can also be drug-induced and related to malignancy.[2] HIV / AIDS is associated with many alterations in endocrinal function. A wide range of cutaneous manifestations is reported in AIDS cases but there is a dearth of reports of acanthosis nigricans in AIDS cases.

A 40-year-old nonobese female presented with complaints of fever, diarrhea, weight loss and dysphagia off and on since one year and dark skin lesions over the nape of the neck of similar duration. She had a history of blood transfusion eight years back. She was tested HIV positive by ELISA on two occasions. Due to resource constraints, CD4 count and viral load estimation were not carried out. Presence of oroesophageal candidiasis was suggestive of AIDS. Examination of the nape of the neck showed hyperpigmentation and velvety thickening of the skin, which was suggestive of acanthosis nigricans [Figure 1]. No similar changes were observed in flexural areas.

Personal and family history was not suggestive of diabetes mellitus, thyroid dysfunction and tuberculosis. There was no family history of skin changes suggestive of acanthosis nigricans. Patient was not on any medication like nicotinic acid, fusidic acid, oral contraceptives, or triazinate, which are known to cause acanthosis nigricans.[1]

Investigations to rule out endocrinopathy and malignancy were carried out. Blood sugar, lipid profile, thyroid profile and occult blood in stool were normal. X-ray chest and USG abdomen also did not show any abnormality. PAP smear for cervical cytology was normal. Histopathological examination revealed

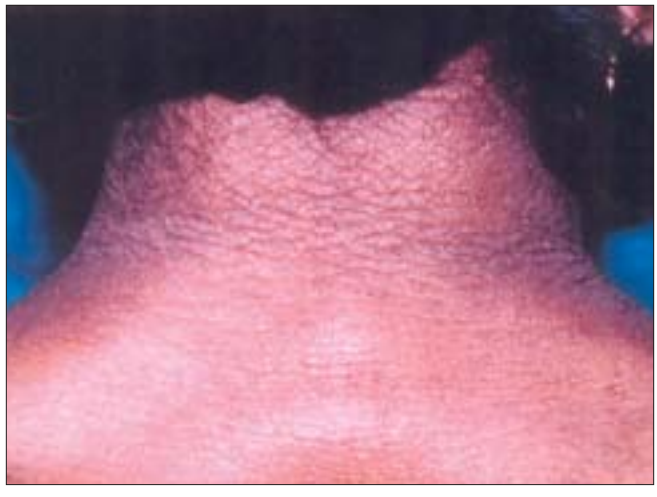

Figure 1: HIV positive female with acanthosis nigricans

hyperkeratosis and irregular papillomatosis, which was suggestive of acanthosis nigricans. The patient was offered opportunistic infection management as and when required but antiretroviral therapy could not be started due to inadequate resources.

Any severe and chronic illness can change the rate of hormone secretion / clearance or both, even in the absence of pathological involvement of the organ concerned. Maltez *et al*. reported a case of AIDS who presented with three opportunistic infections (esophageal candidiasis, tuberculosis and atypical mycobacteriosis) with acanthosis nigricans. They suggested that acanthosis nigricans with AIDS behaves like a paraneoplastic syndrome.[3] Another AIDS case has been described by Mellor-Pita *et al*., in which the patient developed insulin resistance, diabetes mellitus and acanthosis nigricans after treatment with protease inhibitors.[4] Endocrinal / metabolic alteration in AIDS can be a direct consequence of opportunistic infections, malignancy or therapy.[5] It is enigmatic whether the acanthosis nigricans in this case was related to underlying HIV infection or was a chance finding.

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