Elephantiasis Nostras Verrucosa Cutis

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Elephantiasis nostras verrucosa cutis (ENV) is a rare presentation of chronic lymphedema that affects gravity-dependent body parts - especially lower limbs. It is clinically characterized by non-pitting edema and progressive cutaneous hypertrophy leading to hyperkeratotic papulo-nodules which causes a verrucose or cobblestone-like appearance **[1]**. Differential diagnoses include lymphatic filariasis, and chromoblastomycosis as well as non-infectious conditions like lipodermatosclerosis, pretibial myxedema, lipidema, and venous stasis dermatitis **[1,2,3].** Although the exact pathogenesis is still not known, it is believed that as the lymphatic channels are damaged and blocked, excessive protein-rich fluid accumulates in the dermis and subcutaneous tissues. This leads to decreased oxygen tension leading to decreased local skin immunity. As a result, there is increased susceptibility to infections. All these ultimately lead to swelling, fibrosis, and disfiguration of the area and a vicious cycle ensues **[1,4].**

Our case is of a 42-year-old normotensive, non-diabetic male diagnosed with lymphatic filariasis 10 years ago. He presented with progressive swelling of both lower limbs, left more than right with multiple clustered small nodules each of a few millimeters in size affecting the left lower limb. He had no other comorbidities. On physical examination, his lower extremities showed bilateral non-pitting edema, lichenification, and hyperpigmentation with induration of skin (Figure 1, 2). There were non-tender multiple nodules that were firm in consistency in the left lower limb extending below the knee. Both the lower limbs were non-erythematous and temperature was not raised. His blood tests which included complete blood count, liver function tests, lipid profile, and renal function tests did not reveal any abnormality. C-reactive peptide was also not raised. Excision biopsy of a few nodules with histopathological examination showed hyperkeratosis, papillomatosis, pseudoepitheliomatous hyperplasia, and extensive fibrous tissue hyperplasia (Figure 3). Gram stain and fungal stains did not reveal any microorganisms. Circulating filarial antigen was negative and microfilaria could not be detected from peripheral blood. Doppler ultrasonography of lower limbs revealed dilated lymphatic channels. Arterial flow was normal but venous flow was sluggish. No thrombi were detected. The patient was given loop diuretic- -torsemide and referred to the plastic surgery department.

Regarding the management, it is vital to treat the underlying conditions. Conservative non-pharmacological measures include compression stockings and medical elastic bandages. Diuretics also have some role in reducing edema. Topical keratolytics also have some benefits for the hyperkeratotic plaques. Surgical intervention is however the treatment of choice in advanced cases **[1].** As outcomes are not satisfying in advanced cases with late presentation

And owing to the cumbersomeness of plastic surgical interventions, early diagnosis on the part of all physicians and primary health care providers is warranted to prevent progression and reduce morbidity.

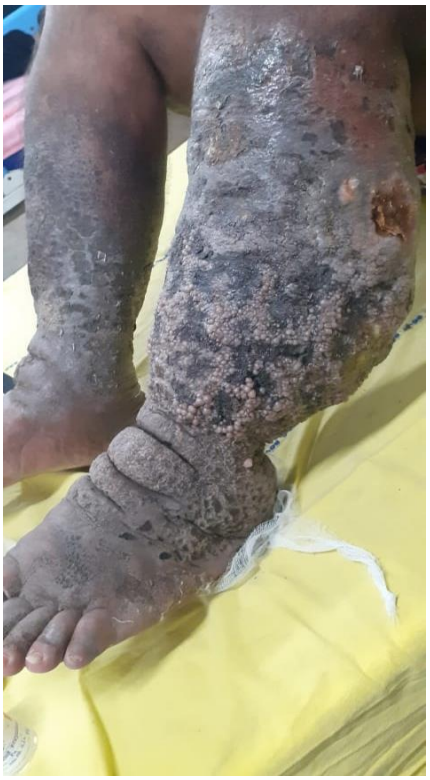

Figure (1)

Figure (2)

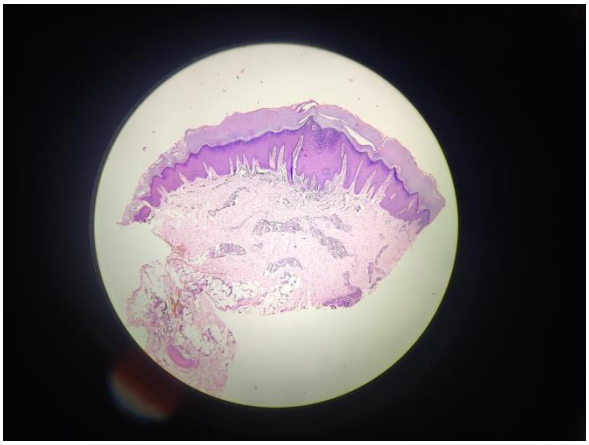

Figure (3): Histopathological slide showing hyperkeratosis, hypergranulosis, acanthosis, papillomatosis, and mixed inflammatory infiltrate in the upper dermis and perivascular areas.

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Ethical Consideration: Consent obtained from patients for using the clinical images for scientific purpose .s

Authors' Declaration: The authors declare that the image has not been published before.

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