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# A Rare Case of Cutaneous Lymphangiectasis of the Vulva Secondary to Filariasis

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Abstract Case Report

Cutaneous lymphangiectasis is a benign condition, that occurs due to the obstruction of the superficial lymphatics. It can be congenital or acquired secondary to radiation, surgery, trauma, scleroderma, neoplasms, or infections. Lymphangiectasis of the vulva is rare and is usually reported following surgery or radiotherapy for treatment of carcinoma cervix. The differential diagnosis include genital warts, herpes and molluscum contagiosum. We report an uncommon case of vulvar lymphangiectasis secondary to filarial etiology

Keywords: Cutaneous lymphangiectasis, Lymphangiectasis of vulva, filariasis.

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#### INTRODUCTION

Cutaneous lymphangiectasis is a benign condition caused by accumulation of lymph in the soft tissues, due to obstruction of dermal and subcutaneous lymphatics. It is characterized by simple dilatation of surface lymphatic vessels. The condition is mostly congenital, resulting from lymphatic malformation, while acquired lymphangiectasis can occur due to obstruction of deeper lymphatic vessels secondary to other etiology [1-3]. Vulva is an uncommon site of cutaneous lymphangiectasis and has been reported following surgery or radiotherapy for genital malignancies. Vulvar lymphangiectasis of filarial origin is extremely rare and very few cases have been reported in the literature [4]. We report an unusual case of cutaneous lymphangiectasis of the vulva secondary to filarial etiology.

## **CASE REPORT**

A 60 year old multiparous, postmenopausal woman presented to Gynecology outpatient services with history of multiple raised lesions over the vulva for the past one year. She was initially asymptomatic, but later developed pain, irritation and foul smelling discharge from the lesions. She was a confirmed case of filarial elephantiasis of the left leg on Diethyl Carbamazine therapy. There was no history of any other constitutional symptoms. There was no history of chronic cough or chyluria. There was no past history of any pelvic surgery or radiotherapy.

On local genital examination, there were multiple grouped, translucent, papulovesicular lesions involving the vulva with oozing of clear fluid in few areas (Figure-1). The lesions were non tender, firm in consistency and there was no regional lymphadenopathy. Filarial elephantiasis of the left leg was noted. Blood investigations reports were within normal limits. Ultrasonography of the abdomen and pelvic organs revealed no abnormality. Mantoux test was negative. Serology for HIV and hepatitis B virus was nonreactive. Multiple biopsies taken from the lesions revealed dilated lymphatic channels in the superficial dermis. The patient underwent wide surgical excision of the lesions under spinal anesthesia. Histopathological examination of the revealed thin-walled dilated lymphatic channels in the superficial dermis with diffuse inflammatory infiltrates. Postoperative period was uneventful. Clinical and histopathological findings were suggestive of vulvar lymphangiectasis secondary to filarial etiology.



Fig-1: Vulvar Lymphangiectasis

### **DISCUSSION**

Cutaneous lymphangiectasis is a benign condition, that occurs due to the obstruction of the lymphatics. It can be acquired secondary to radiation, surgery, trauma, scleroderma, neoplasms, or infections such as tuberculosis, lymphogranuloma venereum and filariasis. Lymphangiectasis involving the vulva is rare and is usually reported following surgery or radiotherapy for treatment of malignancy of the cervix or vulva or following tubercular lymphadenitis of the inguinal nodes [2-4]. The differential diagnosis include genital warts, herpes and molluscum contagiosum [5]. The pathogenesis of cutaneous lymphangiectasis is explained by damage to the deep lymphatic vessels, leading to back pressure and dermal backflow, with subsequent dilatation of the superficial dermal lymphatics [3].

The patient can be asymptomatic or can present with symptoms such as pruritis, burning sensation and pain [6]. Lymphangiectasia is clinically characterized by thin-walled translucent vesicles filled with clear fluid. Occasionally, fleshy nodules can occur. Gradual tissue organization can rarely lead to firm hyperkeratotic appearance of the lesions [4, 6, 7]. Histopathology examination reveals dilated lymphatic channels in the superficial and deep dermis with varying degrees of hyperkeratosis, acanthosis, and papillomatosis in the epidermis. The diagnosis is mainly clinical, aided by histopathological finding of dilated lymphatics in the dermis.

The lesions need to be treated in order to relieve the associated pain, chronic oozing, and infection, that can occasionally lead to cellulitis. Treatment is aimed at reducing the underlying lymphedema and control of infection [4]. Daily compression bandage may be practically difficult at sites like vulva. Surgical excision and carbon dioxide laser are the two main treatment modalities currently practiced [8]. Cryotherapy, electrocoagulation, and injection of sclerosing agents are the other treatment modalities. Surgical excision eliminates the abnormal subcutaneous lymph vessels and cisterns and corrects the aesthetic appearance of the vulva. Carbon dioxide laser vaporizes the superficial lesions thereby sealing off the underlying lymph vessels and reduces recurrence. Recurrence of the lesions can occur and resection or lase therapy can be repeated with no adverse effects. Surgical excision was performed in our patient that resulted in better quality of her life following the procedure.

#### **CONCLUSION**

Cutaneous lymphangiectasis of the vulva secondary to filarial etiology is extremely rare. The diagnosis is based on the clinical and histopathological findings. Treatment should be aimed at reduction of lymphedema and control of infection.

**Informed Consent**: A written and signed informed consent from the individual, who is the subject of this case report has been obtained, prior to submission of this manuscript for publication.

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# REFERENCES

- 1. Arya S, Nyati A, Bunkar M, Takhar RP, Mirdha S. Cutaneous lymphangiectasia of the vulva secondary to pulmonary tuberculosis: a case report. Int J Res Dermatol. 2015 Oct;1:14-6.
- Chang MH, Shiao GH, Tseng CR. Lymphangiectasia-Report of one case and review of the literature. Dermatol Sinica. 1997;15:275-9.
- 3. Singh N, Kumari R, Thappa DM. Vulval lymphangiectasia secondary to tubercular lymphadenitis. Indian Journal of Sexually Transmitted Diseases and AIDS. 2007 Jan 1;28(1):38-39.
- 4. Haneef NS, Ramachandra S, Metta AK, Haritha K. Lymphangiectasias of vulva. Indian dermatology online journal. 2011 Jan 1;2(1):40-42.
- Horn LC, Kühndel K, Pawlowitsch T, Leo C, Einenkel J. Acquired lymphangioma circumscriptum of the vulva mimicking genital warts. European Journal of Obstetrics and Gynecology and Reproductive Biology. 2005 Nov 1;123(1):118-20.

- 6. Amouri M, Masmoudi A, Boudaya S, Amouri A, Ali IB, Bouassida S, Guermazi M, Turki H. Acquired lymphangioma circumscriptum of the vulva. Dermatology online journal. 2007;13(4), 10.
- 7. Sharma R, Tomar S, Chandra M. Acquired vulval lymphangiectases mimicking genital warts. Indian
- journal of dermatology, venereology and leprology. 2002;68(3):166-7.
- Vignes S, Arrault M, Trévidic P. Surgical resection of vulva lymphoedema circumscriptum. Journal of Plastic, Reconstructive & Aesthetic Surgery. 2010 Nov 1;63(11):1883-5.