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## **Research Paper**

**Medical Science** 



# Vulval Lipoma.. A Rare Site

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### ABSTRACT

Lipoma is the most common benign tumour of soft tissues. However, lipoma rarely presents at vulva. We present a case of vulval lipoma in a 26-yr-old woman which is the 6th case reported in adults. She underwent surgical excision. Follow up has shown her to be asymptomatic.

## Keywords :Adipocytes,Lipoma,Liposarcoma,Mesenchymal cell tumor.

#### INTRODUCTION

A lipoma is a benign tumor composed of adipose tissue. It is the most common form of soft tissue tumor. Lipomas are soft to the touch, usually movable, and are generally painless. Many lipomas are small (under one centimetre diameter) but can enlarge to sizes greater than six centimetres. Lipomas are commonly found in adults from 40 to 60 years of age.

Lipoma also called universal tumour is widely disseminated benign mesenchymal neoplasm most commonly found over nape of neck, abdomen, buttocks, trunk, thigh and forearm1 .Its occurrence over vulva is so rare that fewer than 70 cases have been reported in world literature; so prognostically it becomes mandatory to distinguish it from malignant counterpart, i.e. liposarcoma2.The aim of this article is to report a case of vulval lipoma on account of its rarity.

#### CASE REPORT

A 26 year old woman presented to us with complaints of soft tissue swelling hanging between thighs since 7 years. It was slowly growing in size and causing discomfort while walking over the period of time.

On examination there was a soft tissue mass, arising from right labia majora. The mass measured 25 cm X 30 cm X 15 cm, was freely mobile and slip sign was positive (Fig. 1). The tumour had smooth surface, clearly defined edges and normal overlying skin on inspection. Consistency was firm on palpation.

Ultrasonography revealed evidence of 16 cm × 18 cm mixed echotexture lesion with mild vascularity outside the vulva with few flakes of calcification. Impression: lipoma.

Surgical excision was done under spinal anaesthesia. A circular incision taken at the base near right labia majora, the pedicle was dissected & feeding vessels were cauterised. Wound was closed primarily with removal of complete mass (Fig.2-3).

Grossly the external surface was covered with skin flap. Cut surface showed capsule with congested blood vessels .Cut section was greasy yellow with partially nodular & partially homogenous appearance .Histopathological evaluation was tumour composed of mature adipocytes arranged in lobular sheets separated by thin fibrovascular septae (Fig 4).

Patient was discharged on 3rd day with follow up on day 10. Post-operative recovery was uneventful (Fig 5).

#### DISCUSSION

Embryologically, vulva is the result of the junction of the cloacal endoderm, urogenital ectoderm, and paramesonephric mesodermal layers. It contains the labia majora, labia minora, clitoris, vestibule, urinary meatus, vaginal orifice, hymen, Bartholin glands, and Skene ducts. Different epithelia, from keratinized squamous epithelium to squamous mucosa, cover the vulva. A variety of lesions may present as mass at the vulva, such as Bartholin cyst, mucus cyst, epidermal cyst, fibroma, fibromyoma, lipoma, haemangioma.

On the labia majora, lipomas may appear as soft sessile or pedunculated masses varying in size. By definition, the principal component of lipomas is mature adipocytes. As with lipomas at other site in body, these tumors do not usually require surgical excision unless they become painful or cosmetically unacceptable to the patient.

Benign tumors of the vulva are normally classified according to their origin as epithelial cell tumors (e.g., keratinocytic, adnexal and ectopic tumors), or mesenchymal cell tumors (e.g., vascular, fibrous, muscular, neural, adipose and melanocytic tumors)2. There are very few reports on conventional lipomas in the vulva (Table 1) the most recent report by Agarwal et al. in 20043 described a 35-yr-old woman with a lipoma arising from the left labia minora. Although lipomas are well-known fatty tumors both clinically and pathologically, their precise etiology is unknown. However, one of the most commonly implicated etiologic factors is trauma.

# Table 1 : CASES OF VULVAL LIPOMA REPORTED IN LITERATURE just about here.

It has also been suggested that trauma-induced cytokine release triggers pre-adipocyte differentiation and maturation4 .An association with gene rearrangements of chromosome 12 has been established in cases of solitary lipomas(abnormality in the HMGA2-LPP fusion gene)5. Correlation between the HMG I-C gene and lipoma development is also suggested by  $\mathsf{Ono6}.$ 

Lipomas and liposarcoma represent the lipogenic vulval tumours.Clinically lipomas must be differentiated from cystic swellings of canal of Nuck and Bartholin glands7 .Extensive tissue sampling is required to differentiate lipoma from liposarcoma. Preoperative biopsy or MRI is helpful. Lipoma has been identified in all age groups but usually appear in 40-60years of age. Recently, CT and MRI have been used with some success to differentiate the two8.

Complete surgical excision with the capsule is advocated to prevent local recurrence in case of lipoma, while wide local excision will be required for liposarcoma.

#### CONCLUSION

Vulval lipoma is extremely rare. To our knowledge this is the 6th case of vulval lipoma and, 5th case reported in adult. Complete surgical excision is required treatment though histopathological evaluation has final role; usually light microscopic morphology alone using special stains (oil Red O, Sudan) are essential.



Figure 1Pedunculated mass Figure 2 Incision at base of mass







Figure 5:Post operative recovery.

# TABLE 1: CASES OF VULVAL LIPOMA REPORTED IN LITERATURE

AUTHOR	AGE OF PATIENT	DURATION	SITE	SIZE(cms)
De Lima Filho et al	35 yrs	10 years	Rt labia majora	10
Fukamizu et al	7 month	7 month	Rt labia majora	3.5 x 5.5 x 3.5
Van Glabeke et al	5 month	5 month	Preputium Clitoridis	Unknown
Kehagias et al	52years	Unknown	Rt labia majora	17 x13 x7
Agarwal et al	35 years	6 months	It labia majora	4 x 4
Jung Hoon Lee et al	17 years	12 months	Rt labia majora	8.2 x 5.5 x 3.8
PravinTungenwar, Girish D Bakhshi	40 years	2 years	Rt labia majora	5 x 4

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