FIBROADENOMA OF ABERRANT BREAST TISSUE IN THE VULVA

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Introduction

Aberrant breast tissue may occur anywhere along the embryonic milk line. Although common in the axilla and on the thorax, vulva – which also lies along the milk line, may give rise to accessory breast tissue. The ectopic vulvar breast tissue can give rise to neoplasia, both benign and malignant. But such cases are a rarity.

Between 1900 and 1978, only 18 cases of aberrant breast tissue of the vulva have been reported in the English literature [1,2]. Since then, only occasional cases have been reported by Tbakhhi et al [3] and Rose et al [4]. Of these, only 9 women were not pregnant or puerperal at the time their lesions were excised [1]. In 7 of these 9 women the ectopic vulvar breast tissue gave rise to neoplasia, five fibroadenomas and two adenocarcinomas [1,2,5,6]. Most of these were in the fifth or sixth decade at the time the tissue diagnosis was made [1].

We recently encountered one such case and were encouraged to publish the same due to its rarity.

Case Report

A 30-year-old P2A0 lady reported with complaints of a swelling on the Lt vulva of two years duration. There was a history of chronic discharge from the swelling. The size of the swelling and the discharge got aggravated during menstrual periods. She also gave a history of similar swelling appearing on the Rt vulva during mid cycle since past one year. Examination revealed a 2 x 1 cm subcutaneous masses in her Lt labium majus. The mass was excised and subjected to histopathological examination.

Gross examination of the tissue revealed a 2.5 x 2 cm mass alongwith pieces of irregular tissue. The mass was moderately firm in consistency and greyish white in colour. Histological examination showed tissue lined by stratified squamous epithelium. Underlying areas were composed of mature breast tissue with prominent fibroadenomatous change.(Fig-1)

Discussion

It was believed that the mammary tissue first appears in the form of a band-like epidermal thickening

called the mammary line or ridge which extends from the forelimb to the region of the hind limb in the 7-mm embryo. Most of the mammary ridge disappears after its formation, except at the thoracic region, which thickens to form the mammary primordium. This subsequently develops to form the network of lactiferous ducts and the terminal duct lobular unit of the breast.

Occasionally the mammary line can persist to give rise to accessory mammary tissue. Polymastia has been found in about 5% of Japanese women. Although majority have one additional breast but upto 10 additional breast tissue have been reported [7]. Accessory breast may take several forms and it has been classified by Kajava [8] as: 1) complete breast with nipple, areola and glandular tissue, 2) supernumerary breast without areola, but with nipple and glandular tissue, 3) supernumerary breast without nipple, but with areola and glandular tissue, 4) aberrant glandular tissue without nipple or areola, 5) pseudomamma with nipple and areola but without glandular element, 6) polythelia-presence of nipple only 7) polythelia areolaris – presence of areola only, and 8) polythelia pilosa- presence of only patch of hair.

In rare instances, aberrant breast tissue has been

Fig. 1 : Vulval fibroadenoma (H & E x 40)

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found to occur outside the milk ridge also. Occurrence in sites as shoulders, buttocks or ears reflect a reversion to characteristics of lower animals. Breast tissue is normally located on the labia in whales, porpoises and dolphins. The first description of vulvar breast tissue in human females is attributed to Hartung, who in 1872 reported a labial mass in a 30 year old female [9]. But the occurrence of this in human appears to be rare. Pregnancy seems to influence the recognition of this vestigial tissue. Aberrant breast tissue of the vulva has been invariably benign when diagnosed during the gravid state [1].

The phenomenon of supernumerary breasts has been re-evaluated in the light of recent observations of mammary-like anogenital glands (MLG), which are a normal constituent of the vulva and are closely related to eccrine glands. An analysis of the literature reveals that the concept of 'milk lines' originated as a mixture of phylogenetic and ontogenetic theories at the beginning of this century and was not supported by observations in the human embryos, which show that primordia of the human mammary glands do not extend beyond the axillary-pectoral area. The breasts and the vulva are so widely separated by time and space that the vulvar MLG cannot be derived from the mammary ridges or milk lines. The profile of the MLG, which can also reveal some apocrine or eccrine features, makes these glands the most likely source of a series of lesions occurring in the anogenital region and comprising of lactating glands, lactating adenoma, fibroadenoma, hidrocystoma, hidradenoma papilliferum, and most cases of extramammary Paget's dis-

ease and invasive adenocarcinoma [10].

The appearance of any vulvar mass should be observed or subjected to a confirmational biopsy. However, if regression is not significant, then excision is warranted. Any vulvar mass in the older, non-pregnant women requires prompt definitive diagnosis and appropriate treatment.

REFERENCES

1. Hassim A M. Bilateral fibroadenoma in supernumerary breasts of the vulva. *Br Obstet Gynecol* 1969; 76: 275-7.
2. Garcia J, Barry S V, Hochberg C J, Ingram J M. Aberrant breast tissue of the vulva. *Obstet Gynecol* 1978; 52 : 225-8.
3. Tbakhhi A, Cowan DF, Kumar D, et al. Recurring phylloides tumour in aberrant breast tissue of the vulva. *Am J Surg Pathol* 1993; 17 :946-50.
4. Rose PG, Roman LD, Reale R et al. Primary adenocarcinoma of the breast arising in the vulva. *Obstet Gynaecol* 1990; 76: 537-9.
5. Hendrix R C, Behrman S J. Adenocarcinoma arising in supernumerary gland in the vulva. *Obstet Gynecol* 1956;8: 238-41.
6. Foushee J H, Pruitt H B. Vulvar fibroadenoma from aberrant breast tissue - Report of two cases. *Obstet Gynecol* 1967;29:819-23.
7. DeCholnoky T. Supernumerary breast. *Arch Surg* 1939;39:926-41.
8. Kajava J. The production of supernumerary nipples in the Finnish population. *Duodecim* 1915; 31 : 143-7.
9. Dreaver JB, McFarland J, editors. *The Breast: Its anomalies, its diseases and their Treatment*. Philadelphia , P Blakinston Son & Co, 1971: 61-5.
10. Van-der-Putte SC. Mammary-like glands of the vulva and their disorders. *Int J Gynecol Pathol* 1994, 13(2): 150-60.