Nodular Hyperplasia of the Bartholin's Glands

Bartolin Bezinin Nodüler Hiperplazisi

Nodüler Hiperplazi / Nodular Hyperplasia

Emel Kurtoğlu[1], Rabia Kaya[2], Haldun Arpacı[1], Nevin Topak[3], Deniz Cemgil Arıkan[4]
[1]Kadın Hastalıkları ve Doğum, Ereğli Devlet Hastanesi, Konya,
[2]Patoloji Bölümü, Ereğli Devlet Hastanesi, Konya, [3]Patoloji Bölümü, Karaman Devlet Hastanesi, Karaman,
[4]Kadın Hastalıkları ve Doğum ABD, Kahramanmaraş Sütçü İmam Üniversitesi Tıp Fakültesi, Kahramanmaraş, Türkiye

Özet

Bartolin bezinin kist ve absesi gibi benign hastalıkları, bu bezde şişliğe yol açan en sık sebeplerdendir; buna karşın malign hastalıkları ender görülmektedir. Bartolin bezinin noduler hiperplazisi, benign davranışlı nadir lezyonlarından birisidir. Noduler hiperplazinin bir başka çok nadir lezyon olan adenomdan ayırıcı tanısında, histopatolojik özelliklere göre tanımlanmış ve kabul edilmiş kriterler kullanılmaktadır. Bu olguda, sol labium majusta ağrılı şişlik ile başvuran ve bartolin bezi absesi olarak düşünülmüş olan bir hasta sunulmaktadır. Hastaya, kitlenin noduler yapısı sebebiyle total cerrahi ekzisyon uygulanmış ve histopatoloji sonucu noduler hiperplazi olarak bulunmuştur.

Anahtar Kelimeler

Bartolin Bezi; Nodüler Hiperplazi; Adenom

Abstract

The benign diseases of Bartholin's glands like cysts and abscesses are the most common lesions causing swelling of the glands whereas malign lesions are rare. Nodular hyperplasia of the Bartholin's glands is one of the rare lesions with benign behaviour. There are postulated criteria defined by histopathologic characteristics for differential diagnosis of nodular hyperplasia from adenoma which is an other extremely rare lesion. In this case report, a woman presented with painfull swelling of the left labium majus and thought to have Bartholin's glands abscess was reported. The patient underwent total surgical excision because of nodular structure of the mass and histologic examination revealed nodular hyperplasia of the Bartholin's glands.

Keywords

Bartholin's Glands; Nodular Hyperplasia; Adenoma

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Corresponding Author: Emel Kurtoğlu, Kadın Hastalıkları ve Doğum Bölümü, Ereğli Devlet Hastanesi, Konya, Türkiye.
T.: +90 3327131927/2312-2223 GSM: +905052600239 E-Mail: emel0022@mynet.com

Introduction

The Bartholin's glands are located deep in the posterior third of each labium majus, just inferior and lateral to the bulbocavernosus muscle [1]. Bartholin's glands lesions can be classified as cysts, abscesses, hyperplasia, adenoma/adenomyoma, carcinoma, and soft-tissue/mesenchymal lesions. Cysts and abscesses, which are caused by obstruction of the main duct and secondary infection, are the most common lesions. Drainage and marsupialization are usually used in their treatment, along with appropriate antibiotics [2]. Malignant lesions, which can be diagnosed by total excision of the glands, are rarely seen, and differential diagnosis is difficult. Postulated criteria are used for separating nodular hyperplasia from adenoma [3]. Nodular hyperplasia is characterized by acini and an unencapsulated/irregular outline, lobular architecture, maintenance of duct-acinar relationship, and mucin presentation. Conversely, adenomas are sharply circumscribed and display haphazard/diffuse proliferation of glands and tubules, loss of lobular architecture, loss of duct-acinar relationship, and loss/decrease of intracellular mucin.

Herein, we report the case of a 41-year-old woman who presented with a painful, rapidly growing vulvar mass on the left labium majus. She underwent total excision of the left Bartholin's gland, and the condition was diagnosed as nodular hyperplasia.

Case Report

A 41-year-old woman attended our hospital with a painful and rapidly growing vulvar mass on the left labium majus in the region of the Bartholin's gland; the condition had persisted for five days. On physical examination, a firm mass was found, measuring almost 3x3x2.5 cm in diameter, which included cystic and nodular areas. The patient underwent surgical excision of the mass. First, a vertical incision was performed and purulent secretion was drained; then, a nodular mass, gray-brown in color and measuring 3x2.5x2 cm, was totally excised.

On microscopic examination, inflammation was found, including cystic dilatation and abscessing in some areas in the Bartholin gland's duct. Nodular hyperplasia was detected, with lobular structure circumscribed to some degree, and consisting of ductus and acini. Duct-acinar relationship was maintained and squamous metaplasia was seen in some areas [Figure 1]. Cytologically, the acini were composed of clear, columnar cells with basal nuclei and surrounding myoepithelial cells. In addition, mucin presented in the acinar epithelium, and histochemistry

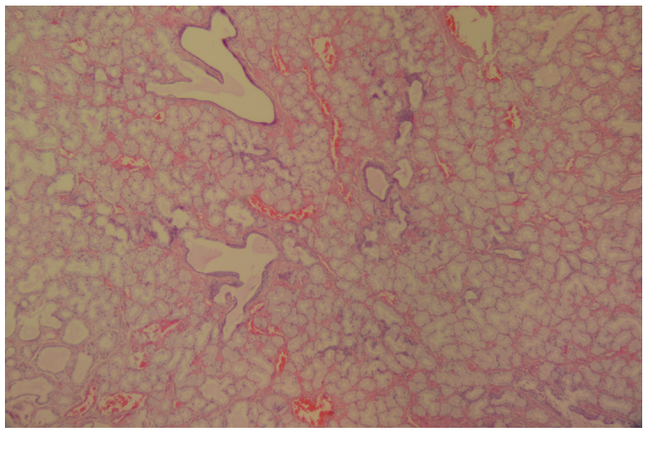


Figure 1. Maintenance of duct-acinar relationship and squamous metaplasia can be seen in the nodular hyperplasia of the gland.(H&E; X40)

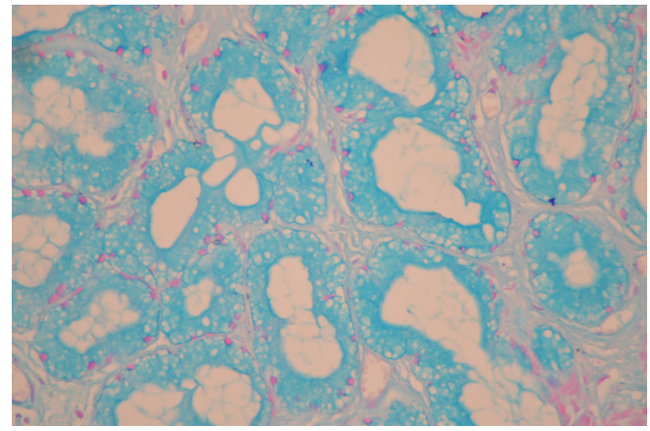


Figure 2. Mucin presented in the aciner epithelium and was positive for Alcian Blue.(Alcian Blue; x 400)

was positive for PAS and Alcian Blue [Figure 2]. Myoepithelial cells could be appreciated and, there was no cytologic atipia, mitosis, necrosis or infiltrative pattern in regard to malignancy.

Discussion

Lesions of the Bartholin's gland are most often due to benign diseases, such as cysts and abscesses, whereas malignant lesions are rare. In a study of 72 cases of Bartholin's gland lesions, 64 % were ductal cysts, 22% were abscesses, and 14% were nodular hyperplasia [4]. Malignant lesions are often solid in structure; only a few benign solid lesions have been reported in the literature, and they are either nodular hyperplasia or adenoma. Although drainage is usually the preferred treatment of Bartholin's gland swelling, total excision is recommended if a solid structure exists [5]. In our case, the vulvar mass, which included solid nodular and cystic areas, was excised completely, due to suspicion of malignancy, and it was diagnosed as nodular hyperplasia.

Diseases of the Bartholin's gland are often seen in women of reproductive age, as the glands undergo involution and atrophy after age 30; carcinoma tends to occur after menopause. Nodular hyperplasia is a rare lesion with benign behavior, and there are a few cases in the literature of nodular hyperplasia in women of different age groups [5, 6]. Our patient was 41 years old and in the premenopausal period.

Differential diagnosis of nodular hyperplasia and adenoma has been very difficult. The criteria for separating these lesions were defined by Koenig and Tavassoli [3], who reviewed 19 cases: 17 cases of nodular hyperplasia, one adenoma case, and one adenomyoma case. In nodular hyperplasia, there was a proliferation of mucus-secreting acini, with preservation of the normal duct-acini relationship, and intraluminal secretions were positive for PAS and Alcian Blue. The histopathologic findings in our case were the same as the cases in their study, and mucin in the epithelium of acini was positive for PAS and Alcian Blue.

Nodular hyperplasia is a benign lesion of the Bartholin's gland; however, a study by Kazakov et al. [7] mentioned the probability of a hyperplasia-adenoma-carcinoma sequence. They studied two examples of hyperplasia of the Bartholin's gland; in one case, there was a squamous metaplasia of larger ducts, and a monoclonal pattern was found in the other case, suggesting that the lesion may be a process rather than simple reactive hyperplasia.

Although inflammatory lesions are the most common reason for swelling of the Bartholin's gland in all age groups, rare lesions, such as nodular hyperplasia, should be considered in cases of presentation of a solid mass. Total surgical excision is required for diagnosis, and the postulated criteria are used for differential diagnosis.

Competing interests

The authors declare that they have no competing interests.

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