

BREAST INTRADUCTAL PAPILOMA

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BREAST INTRADUCTAL PAPILOMA (Abstract): *Introduction* Intraductal papilloma of the breast is characterized by a proliferation of epithelial and myoepithelial cells overlying fibrovascular stalks creating an arborescent structure within the lumen of duct. *Case report* We present a 36 years female patient with history of bleeding from the nipple of right breast since last 3 months. Examination of right nipple revealed bleeding and mammography show a right ductal papilloma. We performed microdochectomy of the involved duct with excision of ductal papilloma of the right breast. Histopathology of the excised specimen revealed ductal papilloma with adenosis and ductal hyperplasia. *Conclusion* If papilloma is located to a single duct, microdochectomy gives satisfactory results in younger patients with a minimal interference with the breast.

KEY WORDS: BREAST; INTRADUCTAL PAPILOMA; DUCTOSCOPY; MICRODOCHECTOMY.

SHORT TITLE: Breast intraductal papilloma
Papilom intraductal de sân

HOW TO CITE: Sahu KS, Singh KP, Singh PB, Bhushan S, Aeron K, Sinha M, Sachan KP. [Breast intraductal papilloma]. *Jurnalul de chirurgie (Iasi)*. 2012; 8(2): 189-192

INTRODUCTION

Intraductal papilloma of the breast is characterized by a proliferation of epithelial and myoepithelial cells overlying fibrovascular stalks creating an arborescent structure within the lumen of duct.

They are broadly divided into central (large duct) papilloma, usually located in the sub areolar region and peripheral papilloma arising in the terminal duct lobular unit (TDLU) [1].

CASE REPORT

A 36 years female patient presented with history of bleeding from the nipple of right breast since last 3 months.

Examination of right nipple revealed bleeding from a single duct on pressing the breast with no palpable mass in the breast parenchyma.

Mammography revealed a right ductal papilloma with a dilated ductal system in the right breast.

Cytology smears from the nipple discharge material showed ductal papillomatous cells with few atypical cells.

Received date: 21.05.2012

Accepted date: 04.06.2012

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Microdochectomy of the involved duct with excision of ductal papilloma of the right breast was done (Fig. 1).

Histopathology of the excised specimen revealed ductal papilloma with adenosis and ductal hyperplasia (Fig. 2,3).



Fig. 1 Microdochectomy of the involved duct with excised ductal papilloma

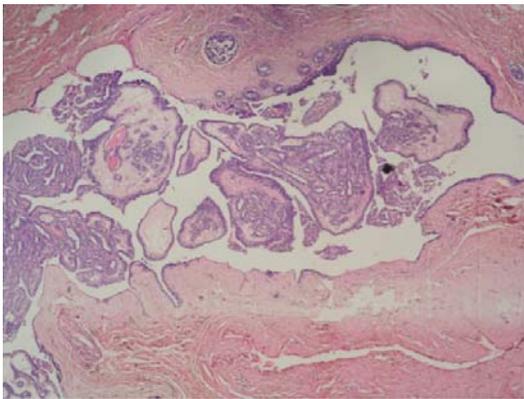


Fig. 2 Histopathology of the excised specimen revealing ductal papilloma

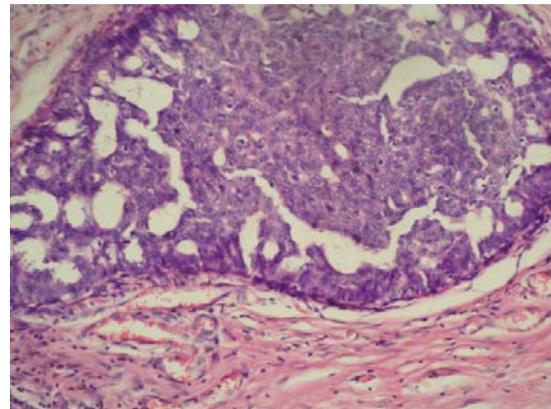


Fig. 3 Histopathology of the excised specimen revealing ductal papilloma with adenosis and ductal hyperplasia

DISCUSSION

Intraductal papillomas of the breast are relatively common lesions with an incidence of approximately 2-3% in humans. They are broadly divided into central (large duct) papilloma, usually located in the sub areolar region and peripheral papilloma arising in the terminal duct lobular unit (TDLU) and sizes can vary from a few millimeters to 3-4 cm or larger.

They can present as single papilloma (central), multiple papillomatous

(peripheral) or juvenile papillomatous. Solitary intraductal papillomas are tumours of major lactiferous ducts, most frequently observed in women 30 to 50 years of age.

Approximately 10% of cases of intraductal papillomas are multiple which tend to occur in the younger patients, are less often associated with nipple discharge, more frequently peripheral, and more often bilateral.

These lesions are more susceptible to the development of carcinoma. More than 80% patients present with spontaneous,

unilateral, serous, serosanguinous and bloody discharge from nipple.

Intraductal papilloma of ectopic breast in axillary lymph node has also been reported in literature [2-6].

Intraductal papilloma is a discrete benign tumour of the epithelium of mammary ducts. It shows a predilection for the extreme ends of the ductal system the lactiferous sinuses and the terminal ductless.

Histopathologically, a papilloma is a mass-like projection that consists of papillary fronds attached to the inner mammary duct wall by a fibro vascular core that is covered with ductal epithelial and myoepithelial cells.

The epithelial component can be subject to a spectrum of morphologic changes ranging from metaplasia to hyperplasia, atypical intraductal hyperplasia, and in situ carcinoma.

Risk of malignancy arising from the papilloma depends on the extent of epithelial atypia. If epithelial atypia is confined to the papilloma, without surrounding atypia, the risk of subsequent invasive breast carcinoma is similar to that of non atypical papilloma.

However epithelial atypia when present simultaneously both within and outside a papilloma is associated with moderate to highly increased relative risk.

Progression to malignancy is more common in peripheral papilloma than the central one. The risk of malignancy is 7% in women less than 60 years of age and 30% in more than 60 years of age. Overall the risk of malignancy in intraductal papillomas is around 1.1%.

Solitary papillomas commonly occurring in premenopausal women are associated with a slightly increased risk (1.5–2.0 times) of developing breast carcinoma [5-12].

Intraductal papillomas are one of the most difficult lesions to be diagnosed on investigation and clinically may also mimic malignancy.

Intraductal papilloma is usually not be detected by conventional mammography. Intraductal papilloma may be demonstrated

as filling defects within the dilated ducts by ductography but is sometimes painful.

High-resolution ultrasound techniques with 3-dimensional views are helpful in visualizing intraductal disorders and are becoming a good complementary investigation.

Intraductal papillomas presents with a variable appearance on MRI, ranging from occult to "small luminal mass" papillomas to irregular rapidly enhancing lesions that cannot be reliably distinguished from invasive malignancy.

Cytology smears from the nipple discharge material provides information about normality, atypia and malignancy and also about papillary formation of the exfoliated cells.

Mammary ductoscopy offers the advantages of accurate localisation of pathology, ductal lavage under direct visualization and its cytological study, and intra-operative guidance especially for lesions deep within the ductal system [13-17].

The only reliable way to both establish the diagnosis and control the discharge is ductal excision, the success of which is dependant on identifying the correct origin of the discharge. If the discharge can be localized to a single duct, microdochectomy gives satisfactory results in younger patients with a minimal interference with the breast.

In older patients where breast-feeding is not required, major duct excision may be preferable irrespective of whether the discharge is localized to one duct, both to avoid inconvenience of further discharge from a different duct and to provide a more comprehensive histology.

Mammary ductoscopy offers the advantages of accurate localisation of pathology, ductal lavage under direct visualization and intra-operative guidance especially for lesions deep within the ductal system.

Furthermore, it can also detect multiple lesions within the same duct. The addition of radiofrequency as a curative

endoscopic procedure is still under investigation [18-20].

CONCLUSION

If papilloma is located to a single duct, microdochoectomy gives satisfactory results in younger patients with a minimal interference with the breast.

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