A prolapsed intraductal papilloma: a case report

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ABSTRACT
Intraductal papillomas (IP) are benign papillary lesions caused by proliferation of mammary ductal epithelium. IP occurs in the breast tissue. Prolapse of IP from nipple can be rarely seen. IPs are generally treated with total excision. A 31-year-old female patient was admitted to our clinic because of a protruded lesion from the nipple of her right breast. On her breast examination, an 8 mm prolapsed mass was seen on the areola of her right breast. Breast ultrasonography showed no other lesions in the breast. The patient was operated with initial diagnosis of IP. The prolapsed mass, the overlying nipple skin and related ductus were totally excised under local anesthesia. Histopathological examination of the specimen revealed intraductal papilloma without atypical dysplasia. Herein, we are presenting a rarely encountered case of IP prolapsed from the nipple of a female patient.

Key words: Breast; intraductal papilloma; prolapsus.

Intraductal papilloma (IP) develops as a result of papillary proliferation of the ductal epithelium, and constitutes 22% of the benign breast lesions. They are treated with total excision. IP lesions form in the breast tissue. Rarely protrusion of these lesions from the nipple can be seen. They are treated with total excision. Herein, we are presenting a rarely encountered case of prolapsed IP from the nipple of a female patient.

CASE REPORT
A 31-year-old female patient consulted to our outpatient clinic because of a mass protruding from her right nipple. On her breast examination, an 8 mm prolapsed mass was seen on the right breast areola (Figure 1). During physical examination any abnormality was not detected on other parts of the breast, and her left breast. From her personal and family medical history any evidence of breast disease was not found.

Her breast ultrasonographic (US) examination demonstrated an avascular, hypoechoic prolapsed solid mass measuring 8x5 mm which filled the areolar region completely. Mammograms of the patients were not obtained. Based on physical, and US examination findings surgery was planned with the initial diagnosis of intraductal papilloma. The
prolapsed mass, minimal portion of the overlying areolar skin and communicating ductus were totally excised under local anesthesia. Histopathological examination of the specimen revealed intraductal papilloma without atypical dysplasia (Figure 2). Any postoperative complication did not develop, and any recurrence was not seen during 2 years of follow-up.

**DISCUSSION**

Intraductal papillomas (IP) are benign tumours which develop as a result of papillary proliferation of the ductal epithelium. Its incidence is 2-3%, and it is seen between 30, and 77 years of age [1]. IP divides into central, and peripheral types. Central type is a solitary IP which settles in the subareolar region, and it is observed in perimenopausal women. Peripheral type is situated on the proximal parts of the laciferous ducts of young female patients and tends to be multiple [2].

Intraductal papillomas are generally smaller than 3 cm. In our patient the diameter of the mass was 8 mm. However, the patient consulted to the physician at an earlier stage because of the protruding characteristics of the mass.

IP can induce hemorrhagic or non-hemorrhagic nipple discharge. On physical examination the mass can be palpated. In one study, hemorrhagic nipple discharge was seen in 72% of the patients [3]. Although it is generally localized in the breast tissue, and subareolar region, in our case, it protruded from the nipple of the patient.

Intramammary masses are detected by US, and the diagnosis is conclusively confirmed by biopsy. Radiological imaging techniques are helpful in establishing the diagnosis, however for the discrimination between benign, and malign lesions core needle biopsy should be performed.

Treatment of intraductal papillomas consists of total excision. Since the mass lesion of our patient was protruding, total excision was performed both for diagnosis, and treatment.

If intramammary IP lesion can be located using radiological techniques, then excision, without needle biopsy is recommended. Core biopsy is recommended for cases with radiologically suspect malignancy or in the presence of microcalcification, and distorted tissue ultrastructure. If small papillary lesions can be totally excised, and histopathologic examination does not reveal any evidence of atypia,
then the patient can be followed up with US, and mammographic monitorization [4].

In the differential diagnosis, nipple adenoma, and papillary lesion, Paget’s disease, eczematous dermatitis, and pyogenic granuloma should be taken into consideration. Nipple adenoma is a proliferation of the squamous epithelium. It settles immediately under the nipple, and causes rugged scaly nipple with discharge. Advanced lesions protrude from the nipple, and appear as a red granular mass [5]. Histopathological differentiation of the excised mass can be achieved. If untreated, papillary lesion of the nipple also protrudes. Nipple erosion can cause ulceration, nipple mass or discharge [6]. Paget’s disease, and eczema can be discriminated from other lesions with their characteristic cutaneous incrustations. Papillary lesions of the breast can be rarely misdiagnosed as intraductal papillary carcinomas. Therefore histopathological examination is important both for diagnosis, and determination of potential malignancy.

IP prolapsed from the nipple is a rarely seen abnormality. For its diagnosis, and treatment, it is sufficient to excise the lesion together with its communicating ductus.

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