Ductography: The Diagnostic Procedure of Choice in Patients with Abnormal Nipple Discharge

A 38-year-old lady presented to the Ibn Sina Breast Care Centre, Dhaka with the complaints of bloody discharge through the left breast nipple. On examination, there was spontaneous bloody discharge from left breast nipple through a single duct. There was no mass on palpation. She was then referred for ultrasonography and ductography of the left breast. USG showed multiple cysts, however no intracystic solid portion could be noted. Ductography revealed dilated duct with contrast agent filling defects approximately 2.9 cm from the nipple and sudden cut-off of the contrast column about 3.7 cm from the nipple. Findings are consistent with intraductal papilloma with duct ectasia.



Fig 1. Galactography of left breast

Abnormal nipple discharge is associated with an underlying malignancy in 1.2% to 15% of patients. Abnormal discharge is defined as nonlactational, persistent, spontaneous, and unilateral. Bloody or hemoccult-positive discharge is more likely to be associated with cancer (5% to 28%) and should prompt further evaluation. However, clear or watery discharge has been associated with breast cancer in up to 7% of cases. Mammography is advocated as part of the routine evaluation of women with breast complaints. Mammography is associated with a 9.5%

false-negative rate and a 1.6% false-positive rate in detecting breast cancer in patients with nipple discharge.⁴ Ductography is an increasingly available method of examination and is relatively easy to perform with few complications. Ductography has been shown to be accurate in providing the location and depth of ductal abnormalities when a single duct is identified as the source.¹ Data regarding the location of the lesion greatly facilitate biopsy, especially with deep lesions. Ductography has also been shown to improve the diagnostic yield of surgical biopsy from 67% in nonstudied patients to 100% in patients receiving a ductogram.⁵

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