

Approach to Nipple Discharge. Guideline 2018

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INTRODUCTION



- the most commonly encountered breast complaints
- 50 to 80 percent of women in their reproductive years can express one or more drops of fluid
- 6.8 percent of women referred to a surgeon

Benign nipple discharge:

- bilateral,
- multiductal,
- occurs with breast manipulation

The risk of cancer is higher:

- spontaneous,
- bloody,
- unilateral, uniductal,
- associated with a breast mass,
- and/or occurs in a woman over 40 years of age.

TYPES OF NIPPLE DISCHARGE

- normal milk production (lactation)
- physiologic
- pathologic (suspicious)

■ Lactation

- The normal secretory products of the breast are milk and colostrum During pregnancy and the postpartum period.

Bloody nipple discharge can be seen in 20 percent of women during the second or third trimester of pregnancy.



- Physiologic:(galactorrhea)

- nonpathologic nipple discharge unrelated to pregnancy or breastfeeding.

- bilateral milky nipple discharge

- involving multiple ducts.

- caused by **hyperprolactinemia:**

—————→ secondary to medications, endocrine tumors (pituitary adenoma), endocrine abnormalities, or a variety of medical conditions.

Pathologic (suspicious) nipple discharge

- Unilateral
- localized to a single duct
- persistent, and spontaneous
- serous (clear or yellow), sanguineous (bloody), or serosanguineous (blood-tinged).

History

- medication use
- the appearance of the discharge
- discharge is spontaneous or provoked by manipulation of the breast
- unilateral or bilateral.
- A history of recent trauma
- Recent onset of amenorrhea or other symptoms of hypogonadism (hot flashes, vaginal dryness) should prompt consideration of hyperprolactinemia

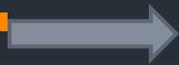
Physical examination

- specific goals:
 - skin changes
 - skin retraction, dimpling, edema or erythema, ulceration or crusting of the nipple, and changes in skin color.
 - symmetry and contour of the breasts
 - Elicit discharge from a nipple and identify the involved duct or ducts
 - enlarged axillary or supraclavicular lymph nodes
 - Identify localized areas of tenderness

Bilateral discharge

- Bloody nipple discharge
- abnormal mammogram or breast ultrasound,
- breast mass on physical examination
-  requires evaluation by a surgeon

Bilateral discharge

- nonbloody multiductal secretion that is usually normal
-  Medical evaluation and endocrine workup may be required, but surgical intervention is usually not indicated.

Unilateral discharge

Uniductal unilateral discharge underlying pathology:

- papilloma
- intraductal breast carcinoma.

(This is true even if the discharge is not bloody)

multiductal discharge, even if unilateral, is less likely to represent significant breast disease and should be

Differential diagnosis

- Straw-colored or clear transparent discharge:

Straw-colored (yellow) or clear (serous) → papilloma or may be associated with a malignancy.

Unilateral spontaneous serous discharge is considered suspicious and requires a full workup

Differential diagnosis

■ Bloody discharge:

- intraductal carcinoma (in-situ or invasive)
- a bleeding papilloma
- benign fibrocystic changes with an active intraductal component (eg, plasma cell mastitis, ductal ectasia, intraductal hyperplasia, or papillomatosis).
- 20 percent of women during pregnancy and lactation.

Diferential diagnosis

- Staining of the bra without obvious nipple

discharge:

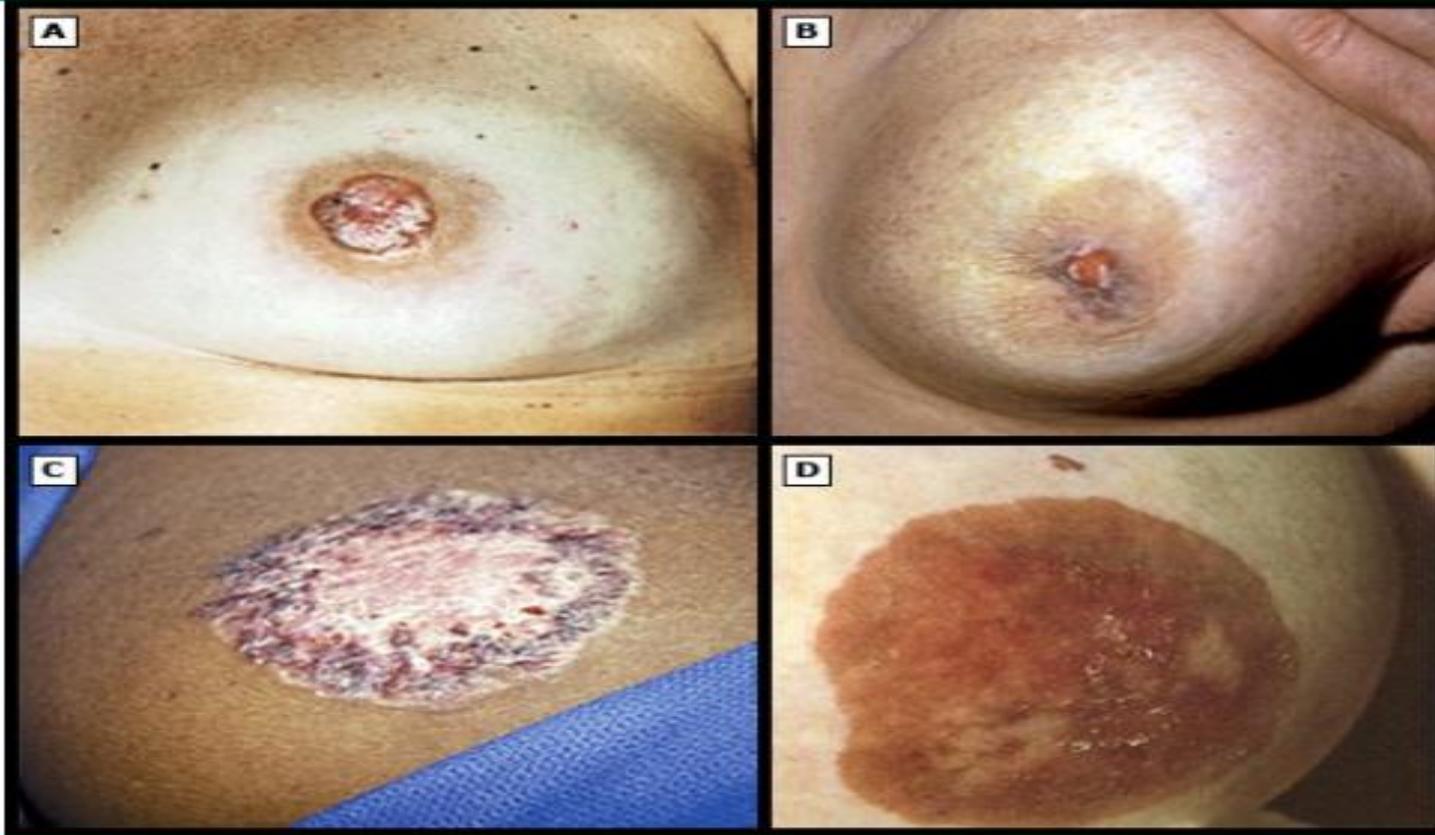
- a stain or spot of blood on her brassiere or underclothing:

examination of the skin around the nipple and nipple-areolar complex

- dermatitis or eczema

- Excoriations

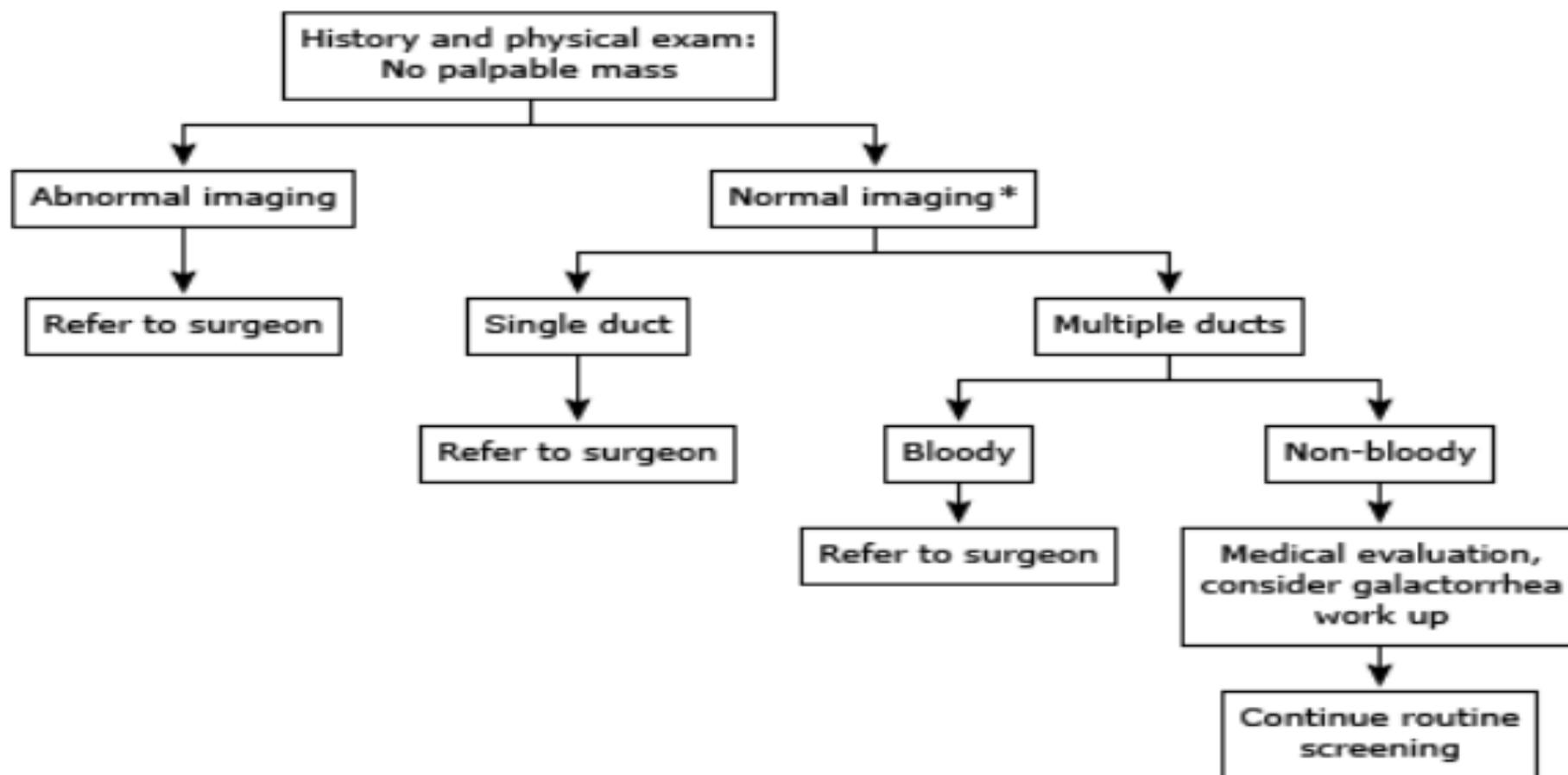
Paget disease of the breast presentation



Various presentations of Paget disease of the breast are represented here. Paget disease is typified by erythematous, scaly, and weeping "eczema" that involves the nipple. Discoloration, depigmentation, and desquamation of the nipple and areola are sometimes seen.

if the lesions persist after conservative treatment, rule out Paget disease with a skin biopsy
. Paget disease is a breast cancer, characterized clinically by an eczematoid appearance with nipple crusting, scaling, or erosion.

Algorithm for management of spontaneous nipple discharge (non-lactating)



* Breast ultrasound is recommended for imaging all patients with nipple discharge. Mammograms are recommended for women \geq age 30.

Adapted from: CRICO/RMF Breast care management algorithm www.rmfm.harvard.edu/bca.

Laboratory examination

- Multiductal discharge

pregnancy test

prolactin levels

renal and thyroid function tests,

appropriate endocrinological follow-up:

(menstrual irregularity, infertility, headaches, visual disturbances, or symptoms of hypothyroidism.)

Imaging

- Mammography
- Ultrasound
- Ductography
- MR ductography

Imaging

- Mammography:

- A mammogram should be performed for women ≥ 30 years of age

- If an abnormality is detected, core biopsy

with clip placement should be performed.

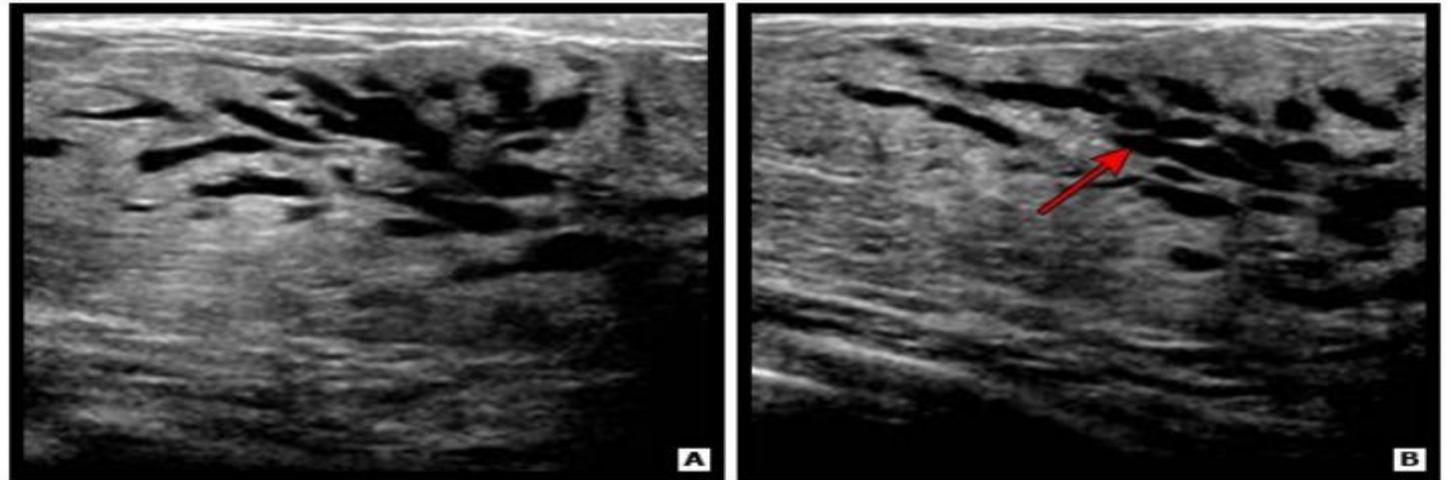
sensitivity and specificity of mammography for detection of cancer or high-risk lesions such as papilloma or atypia range from 7 to 10 and 94 to 100 percent.

Imaging

- Ultrasound:

In a series of 52 patients with suspected ductal disease, ultrasonography had a sensitivity of 97 percent and a specificity of 60 percent with a positive predictive value of 95 percent

Retroareolar dilated ducts: Ultrasound



The ultrasound of the breast is from a 29-year-old lactating woman and shows dilated fluid-filled ducts (red arrow) manifesting as branching anechoic structures in the sagittal (A) and transverse planes (B).

Courtesy of Priscilla J Slanetz, MD, MPH, FACR.

Imaging

- Ductography:

- aid the surgeon in more precisely localizing the proper area at the time of surgery, thereby limiting the amount of tissue excised

- intraductal lesion will appear as an intraductal filling defect:

- complete ductal obstruction

- wall irregularity

TREATMENT

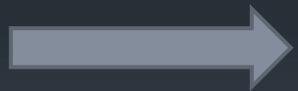
- Medical treatment for physiologic nipple discharge:

Galactorrhea:

Metoclopramide

phenothiazines

SSRIs



the patient should be educated that this is a side effect of the medication

TREATMENT

- Surgical treatment for pathologic nipple discharge:

core biopsy :was not possible or nondiagnostic, a terminal duct excision is necessary to treat the nipple discharge and confirm the diagnosis.

