# ABNORMAL NIPPLE DISCHARGE

## DEFINITION

Nipple discharge is a common complaint among women accounting for 5% of breast-related symptoms. It is classified as abnormal depending on features, such as laterality, cycle variation, quantity, number of ducts involved, color or presentation (expressible or spontaneous). Nipple discharge is considered abnormal if it is not milky; if it is milky, it is abnormal if it occurs at any time the patient is not pregnant, breastfeeding or within 2 years of cessation of breastfeeding (galactorrhea). It may result from variations in normal breast physiology, but it may be indicative of underlying breast disease, prolactinomas, renal or hepatic failure, or medication use. Most nipple discharge results from benign breast conditions, such as mammary duct ectasia, chest wall trauma, intraductal papilloma and nipple stimulation. However, 7-15% of breast cancer first presents with pathological nipple discharge. Discharge from a malignant source is generally a spontaneous, bloody, persistent discharge that is unilateral and from a single duct or associated with a breast mass. The significance of the discharge depends upon its character (e.g., color, spontaneity) and other associated clinical problems, such as irregular menses.

## SUBJECTIVE

Must include:
1. History of bilateral or unilateral milky or clear nipple discharge (expressible or spontaneous) in a woman more than 1 year after last breastfeeding.

OR
2. Other color (bloody, purulent or yellow, green, brown or blue-black) nipple discharge that is bilateral or unilateral and expressible or spontaneous.

May include:
1. History of recent pregnancy or breastfeeding within last year.
2. History of breast stimulation.
3. History of recent use of any of the following agents:
   a. Anesthetics.
   b. Antihypertensives:
      1) Methyldopa (Aldomet).
      2) Reserpine (Seraph, Tensin).
      3) Verapamil (Calan).
   c. Antidepressants and antipsychotic agents:
      1) Opiates (methadone, heroin, codeine).
      2) Phenothiazines.
      3) Tricyclic antidepressants.
   d. Estrogens, hormonal contraceptives.
   e. Gastrointestinal promotility agents and H₂ blockers:
      1) Metoclopramide (Reglan)
      2) Ranitidine (Zantac)
      3) Cimetidine (Tagamet),
   f. Chronic alcohol abuse.
   g. Marijuana.
   h. Amphetamines.
   i. Cocaine
4. Amenorrhea/oligomenorrhea.
5. Recent change in headache patterns.
6. Decreased peripheral vision.
7. Symptoms of hypothyroidism, acromegaly, Cushing’s syndrome, renal or hepatic failure
8. History of acute pain or redness in breast.
9. History of fever.
10. History of previous ductal papillomas or other breast neoplasm.
11. History of fibrocystic breast changes.
| **OBJECTIVE** | Must include: Bilateral or unilateral nipple discharge. (milky, yellow, green or brown (generally benign) or bloody or serosanguineous (more concerning)).
May include:
1. Reddened and/or warm area on breast.
2. Pain on palpation.
3. Changes in visual fields.
4. Dominant mass on breast exam.
5. Abnormal thyroid exam (nodules, enlarged).
6. Chest wall scars or lesions. |
| **LABORATORY** | May include:
1. Fat globules present in microscopic examination of breast discharge.
2. Abnormal cells on Pap test of nipple discharge. NOTE: a normal cytology report is not reassuring due to the high rates of false negative reports.
3. Significant numbers of white cells seen on microscopic examination of discharge.
4. Masses seen on mammogram or ultrasound.
5. Occult blood in nipple discharge. |
| **ASSESSMENT** | Patient with non lactational nipple discharge that may be abnormal. |
| **PLAN** | 1. If nipple discharge is associated with a dominant breast mass refer for appropriate imaging (See Breast Mass protocol), refer to MD/breast specialist. The only clinical predictor of malignancy in a woman with abnormal discharge is the presence of a mass.
2. If nipple discharge is bloody, refer to MD or breast specialist per local procedures.
3. If nipple discharge is milky, spontaneous and from multiple nipple openings,
   a. Order prolactin.
   b. Obtain medication list.
   c. Check visual fields. If visual fields are abnormal, refer for immediate evaluation
   d. Consider TSH if patient is seeking pregnancy, if she has infrequent menses or if she has any other symptoms of thyroid dysfunction.
4. If nipple discharge is milky, spontaneous and is from one nipple opening only or is unilateral, refer to MD.
5. If nipple discharge is milky and seen only with expression,
   a. Check visual fields. If visual fields are abnormal, refer for immediate evaluation.
   b. Offer prolactin (Encourage testing if any other symptoms – infrequent menses or seeking pregnancy).
   c. Ask about menses:
      1) If menses regular, advise no breast stimulation and reevaluate in 6 weeks.
      2) If oligomenorrhea or amenorrhea, consult MD.
6. If the discharge is purulent or if there are signs of acute infection, refer to MD for immediate evaluation unless she is breastfeeding. If breastfeeding, see Breastfeeding Complications protocol.
7. If nipple discharge is not milky or bloody (green, yellow, brownish black), reassure patient and refer to MD. |
| **PATIENT EDUCATION** | 1. Stress importance of follow-up care.
2. Explain relationships between breast discharge and causative factors. Advantages of continuing breast stimulation or medications must be weighed against the inconvenience of the discharge.
3. Explain that for galactorrhea, medication therapies are first line, even in the face of pituitary tumors such as prolactinomas). |
REFER to
MD/ER

1. Persistent unexplained breast discharge.
2. Nipple discharge from a single duct.
3. Nonlactational nipple discharge.
4. Women with abnormal prolactin or TSH levels.
5. Breast mass present.
6. Women who need change of medication thought to cause galactorrhea.
7. Women with change in visual fields or new onset headache.

REFERENCES