



Nipple Discharge

Breast discharge is a common complaint with three possible causes: 1) a hormonal imbalance, 2) a response to medications (pharmacological discharge), or 3) a lesion or diseased breast. Studies have shown that nipple discharge can be found in 50 to 80 percent of women with no disease being present. Most women have a small amount of discharge when their breasts are squeezed. This is normal, but **all discharge needs to be evaluated to determine the primary cause.**

Normal Discharge

A normal discharge occurs from both breasts (bilateral) and from multiple duct openings in the nipple. The color of the fluid is opaque or milky. Production is stimulated by a woman's natural hormones before her menstrual period, by sexual stimulation or by some medications. Excessive squeezing or manipulation can stimulate the breasts to produce fluid. Trauma to the breast area and surgery to the chest area can also cause the production of fluid in the breasts.

Pharmacological Discharge

The use of some common medications may be the cause of breast discharge. The color of the discharge is opaque or milky. If you have a discharge and are taking one of the medications listed below, notify your physician of both the discharge and the medication usage. Many of these medications increase prolactin levels, the hormone that stimulates milk production. This condition is not harmful, but your physician should be informed.

Drugs identified as possibly causing breast discharge:

- **Birth control pills**
- **Hormones such as Estrogen**
- **Blood pressure medication**
Aldomet®
- **Narcotics**
Morphine, methadone, heroin
- **Psychiatric medications**
Thorazine®
Trilafon®
Mellaril®
Permitil®
Prolixin®
Stelazine®
Taractan®
Haldol®
- **Gastrointestinal medications**
Reglan®
Tagamet®
- **Antidepressants**
Amoxapine (Asendin®)
Norpramin®
Pertofrane®
Aventyl®
Pamelor®
- **Heart medications**
Verapamil
Calan®
Isoptin®
- **Herbal Supplements**
Ginseng
Dong Quai

Physiological Discharge

This discharge is opaque or cloudy, in both breasts at the same time, and does not vary with the menstrual cycle. This condition, called galactorrhea, is a result of elevated prolactin (hormone that stimulates milk production) levels. If medications are not the cause, testing for the levels of prolactin in your body may help with your diagnosis. Sometimes this condition occurs in combination with amenorrhea, the absence of menstrual periods. This condition may be caused by a tumor in the pituitary gland or from hypothyroidism (low thyroid levels). Medications may be prescribed to correct the problem or to block prolactin production.

Discharge Caused By Disease

The Discharge That Concerns Physicians Is Usually:

- Persistent, throughout the month, not varying with monthly cycle
- Spontaneous, happens without squeezing the nipple or breast; you find it in your bra
- Unilateral, from one breast only and usually from one duct opening on the nipple
- Clear and sticky (like an egg white), greenish gray or has a bloody appearance

Common Diseases That Cause This Type of Discharge:

- **Intraductal papilloma** (or papillomatosis-if more than one) is a wart-like growth on the wall of the duct. It is not cancerous but may have to be removed surgically. Discharge will usually have some sign of blood but seldom will a lump be involved.
- **Intraductal carcinoma in situ** is a “pre-invasive cancer” or an early stage cancer that clogs up the ducts and sometimes has a discharge. Usually no lump can be felt.
- **Duct ectasia** is a condition in which the ducts are dilated, cells have collected in the area and the area becomes inflamed. Bacteria may be present and can result in an abscess if not treated. Discharge is often a gray or greenish color from one breast, but can involve both breasts. Nipple retraction may occur. Duct ectasia occurs most often around the time of menopause and more often in women who smoke. The condition can be painful but is not cancerous. Treatment involves antibiotics or surgery (if an abscess forms or condition is recurrent after repeated treatment).
- **Paget’s disease** is a slow-progressing disease that causes the breast to secrete a thick discharge that causes irritation and itching of the nipple. The nipple area thickens, develops a crusty scale and eventually resembles an open sore. Cancer is usually found in the ducts and may be in situ (contained in ducts) or invasive (grown through duct). A lump is usually not present. The condition is cancerous and requires surgery.

Diagnosis of Discharge Cause and Type:

A thorough exam of the breast should be performed to check for a lump and to find out which duct or ducts are involved. Fluid from the breast will then be examined. This can be done by sending it to a lab for analysis to see if it contains blood, bacteria, etc. Some testing can be done in the physician’s office. For example, a discharge can be checked for blood by applying a chemical to the breast fluid.

Mammography is helpful in determining if there is anything in the breast that would indicate an underlying cause. In cases where no lump can be felt or no suspicious area appears on mammography or ultrasound, the physician can have a special test, a ductogram (galactography), performed. This test is usually performed if the discharge contains blood or is from one or two ducts on the same breast. A radiologist inserts a small catheter into the duct producing the discharge. A radiographic fluid is then injected and the area is examined by mammography. If it is necessary to remove the duct, the surgeon can have the duct injected and stained with a dye. Only the diseased duct is removed, saving a large portion of the breast.