Nipple discharge

The New South Wales Breast Cancer Institute.

Nipple discharge – the release of fluid from the nipple – is very common. There are 15–20 milk ducts opening onto each nipple. Discharge can come from one or more of these ducts. Nipple discharge can:

- be spontaneous (fluid is secreted from the nipple without any squeezing of the nipple or pressure on the breast), or
- be on expression (fluid is secreted from the nipple when the nipple is squeezed or there is pressure on the breast)
- come from one breast (unilateral) or both breasts (bilateral)
- be clear, yellow, milky, brown, green, or bloodstained in appearance
- originate from one duct (one opening on the nipple) or more than one duct.

Physiological nipple discharge

Discharge of fluid from a normal breast is referred to as 'physiological discharge'. It is usually yellow, milky, or green in appearance, does not occur spontaneously, and often originates from more than one duct. Physiological nipple discharge is no cause for concern. Milky nipple discharge is also normal during pregnancy and breastfeeding.

When is nipple discharge abnormal?

Spontaneous nipple discharge unrelated to pregnancy or breastfeeding is considered abnormal. In most cases it has a benign (ie. noncancerous) cause, and is more likely to be unilateral, confined to one duct, and clear or bloodstained in appearance. Nipple discharge associated with other breast symptoms such as a lump, ulceration, or inversion of the nipple require prompt investigation.

Duct ectasia

This is a benign condition in which there is enlargement of the milk ducts under the nipple with inflammation in the walls of the ducts. It usually occurs in women after menopause. The discharge is usually bilateral, yellow, clear, or green in appearance and arises from multiple ducts. In most cases, no treatment is required

Duct papilloma

This is a growth within a milk duct in the breast, usually near the nipple. It may cause no symptoms, or a discharge that is clear or bloodstained. Duct papillomas are almost always benign. Very rarely, they may be associated with breast cancer. Because of this rare association, they are usually surgically removed.

Nipple eczema

Eczema or dermatitis affecting the skin of the nipple can cause a weeping, crusty nipple discharge. Treatment is the same as for eczema elsewhere on the body.

Breast cancer

Breast cancer is an uncommon cause of nipple discharge. Few women with breast cancer have nipple discharge, and most have other symptoms, eg. a lump or newly inverted nipple. Breast cancer that causes nipple discharge is likely to be benign or early invasive breast cancer rather than advanced breast cancer.

Paget disease of the nipple

This is a benign breast cancer involving the milk ducts. It typically causes a bloodstained nipple discharge with ulceration and erosion of the nipple.

Hormonal causes

Galactorrhoea is a milky nipple discharge unrelated to pregnancy or lactation. It is caused by the abnormal production of a hormone called prolactin which is caused by diseases of glands elsewhere in the body that control hormone secretion, eg. pituitary and thyroid glands.

Drugs and medications

Some drugs can cause abnormally high prolactin levels including oral contraceptives, hormone therapy, and medications used for the treatment of nausea, depression and psychiatric disorders. Drugs such as cocaine and stimulants can also cause high prolactin levels.

How is nipple discharge treated?

Physiological nipple discharge requires no treatment. It is important to stop expressing or squeezing the nipple and breast as this causes more fluid to be produced. The discharge will usually stop when you stop expressing.

Spontaneous, persistent nipple discharge unrelated to pregnancy or breastfeeding needs investigation by examination and imaging of the breast with mammogram and/or breast ultrasound. Sometimes a sample of the discharging fluid is sent to a laboratory for closer examination of the cells.

If any abnormality is found on these tests, either fine needle or core biopsy may be recommended. Sometimes the affected part of the breast needs to be removed by a surgeon.

Will I need surgery?

Surgery for nipple discharge is usually reserved for cases where an abnormality is suspected, eg. papilloma, breast cancer. Surgery may be needed for bloodstained nipple discharge (even if tests show no abnormality) to explore the ducts under the nipple for problems that didn't show up on tests, or as a procedure to cure discharge caused by conditions such as duct ectasia.

Adapted from: 'Nipple discharge' fact sheet. The NSW Breast Cancer Institute www.bci.org.au