How is nipple discharge treated?

Nipple discharge diagnosed as 'physiological discharge' requires no treatment. It is important to stop expressing, or squeezing the nipple and breast, as this causes more fluid to be made. As in breast feeding, the breast will produce fluid to replace the fluid that is removed, and this will continue as long as you are expressing. The discharge will usually stop when you stop expressing.

Nipple discharge that is spontaneous, blood-stained, persistent, and unrelated to pregnancy or breast feeding needs to be investigated further. This investigation will include clinical examination by a doctor, and imaging of the breast with a mammogram and/or breast ultrasound. There is also a specialised X-ray available called a 'ductogram'. A small amount of dye is injected into the discharging duct on the nipple. This outlines the duct and helps to identify abnormal growths in the duct lining. Sometimes the doctor may also send a sample of the discharging fluid for examination of the cells under a microscope to check for cancer cells.

If any abnormality is found on these tests, a biopsy may be recommended. This may consist of a simple test such as a fine needle or core biopsy. Sometimes the area needs to be removed by a surgeon even if the tests are normal because changes in the nipple ducts can be difficult to see on a mammogram and ultrasound.

Will I need surgery?

Surgery for nipple discharge is sometimes warranted. This is usually reserved for cases where a significant abnormality, such as some papillomas, particular if they are large or contain atypical, or cancer is suspected cells. Surgery is usually also needed for blood-stained nipple discharge even if the tests show no abnormality. In this case, it is done to explore the ducts under the nipple to rule out significant abnormalities not seen on tests. Surgery may also be performed as a procedure to cure annoying discharge caused by conditions such as duct ectasia.

Useful contacts/websites Cancer Australia canceraustralia.gov.au Cancer Council cancer.org.au Cancer Council Helpline 13 11 20 Breast Cancer Network 1800 500 258 Australia (BCNA) bcna.org.au

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and plain-English editors.

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IMPORTANT At all times you should rely on the expert judgement of your medical advisor(s). This information guide is not a substitute for medical advice. It is designed to help you understand and discuss your treatment.

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Nipple Discharge

Westmead Breast Cancer Institute



What is nipple discharge?

Nipple discharge is the release of fluid from the nipple. It is a very common breast symptom and in most cases is part of the normal function of the breast rather than being caused by a problem. Nipple discharge alone (without a lump or other nipple change) is a very uncommon symptom of breast cancer.

There are normally 15–20 milk ducts opening onto each nipple. Discharge can come from one or a number of these ducts.

What are the features of nipple discharge?

Nipple discharge may be:

- > Spontaneous (fluid leaks from the breast without any squeezing of the nipple or pressure on the breast); or
- > On expression (fluid only comes out of the nipple when the nipple is squeezed or there is pressure on the breast).

Other questions which can be used to describe nipple discharge include:

- > Is it coming from one breast (unilateral) or coming from both breasts (bilateral)?
- > Is it coming from one duct (one opening on the nipple) or more than one?
- > What colour is it? Nipple fluid is most often yellow, green or milky. This is not usually a cause for concern. Discharge that is blood-stained (bright red), brown or crystal clear can be more significant. If it is difficult to tell what colour it is, then putting some fluid onto a white tissue can help.

Normal hormonal nipple discharge

Nipple discharge is very common. Fluid can be obtained from the nipples of approximately 50–70% of normal women when special techniques, massage, or devices such as breast pumps are used. This discharge of fluid from a normal breast is referred to as 'physiological discharge'.

This discharge is usually yellow, milky, or green in appearance, it does not happen spontaneously, and it can often be seen to be coming from more than one duct. Physiological nipple discharge is no cause for concern.

Milky nipple discharge (either spontaneous or on expression) is also normal (physiological) during pregnancy and breast feeding.



When is nipple discharge abnormal?

Spontaneous nipple discharge unrelated to pregnancy or breast feeding is considered abnormal. In most cases it has a non-cancerous (benign) cause. Spontaneous nipple discharge that is caused by disease (pathology) in the breast is more likely to be from one breast only (unilateral), confined to a single duct, and clear or blood-stained in appearance.

Nipple discharge that is associated with other symptoms such as a lump in the breast or ulceration or inversion of the nipple needs prompt investigation, even if it is not spontaneous or blood-stained.

What causes abnormal nipple discharge?

There are many causes of nipple discharge. These include: Duct ectasia

This is a non-cancerous (benign) condition in which the milk ducts under the nipple enlarge and there is inflammation in the walls of the ducts. It usually occurs in women after menopause. The discharge caused by duct ectasia usually comes from both breasts (bilateral), is yellow, green or brown, and comes from more than one duct. In most cases, no treatment is needed. If the discharge is a nuisance, the ducts behind the nipple can be removed surgically.

Duct papilloma

A duct papilloma is a growth within a milk duct in the breast, usually near the nipple. It may cause no symptoms, or it may cause a nipple discharge that is clear or blood-stained. It usually comes from a single duct and is from one breast only (unilateral). Rarely, duct papillomas can be associated with breast cancer and they can be difficult to diagnose confidently on a needle biopsy so they are sometimes removed surgically if there are atypical features.

Nipple eczema

Eczema or dermatitis which affects the skin of the nipple, particularly if it becomes infected, can cause a weeping, crusty nipple discharge. The treatment is the same as for eczema elsewhere on the body; with cortisone-based creams the main first-line treatment.

Breast cancer

Breast cancer is an uncommon cause of nipple discharge. Less than 5% of women with breast cancer have nipple discharge, and most of these women have other symptoms, such as a lump or newly inverted nipple, as well as the nipple discharge.

Paget's disease of the nipple

Paget's disease is a particular type of breast cancer which involves the nipple. Paget's disease typically causes ulceration and erosion of the nipple skin, and it may be associated with a blood-stained nipple discharge.

Hormonal causes

Galactorrhoea is milky nipple discharge not related to pregnancy or breast feeding. It is caused by the abnormal production of a hormone called prolactin. This can be caused by diseases of glands elsewhere in the body which control hormone secretion, such as the pituitary and thyroid glands.

Drugs and medication

Abnormally high prolactin levels can also be caused by some drugs. These include oral contraceptives, hormone replacement 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. It is also common after breast feeding to have a prolonged milky nipple discharge.