

# Discharges from the nipple

## Discharges from the nipple

Most nipple discharges are caused by physiological aberrations as part of ANDI, may emanate from a single or many milk - ducts and may involve one or both sides. The presence of a single, serous, sanguineous and spontaneous discharge ( ' four S ' ) should be considered pathological and triple assessment should be carried out. Both serous and sanguineous discharges are caused by excessive proliferation of the ductal epithelium, which can be either diffuse or localised or may result from a ductal carcinoma. During pregnancy , the increase in blood flow to the ductolobular tissue may lead to serous or bloody nipple discharge. Hence, a bloody discharge during pregnancy is considered physiological and usually abates spontaneously after childbirth; however, ultrasonography should be performed to rule out malignancy . The clinical significance of the specific colour of the nipple discharge is as follows:

- /uni25CF A clear, serous discharge is commonly caused by ductal papilloma. It is potentially serious and should not be ignored. Multiduct, multicoloured discharge is physiological and the patient may be reassured ( Figure 58.20 ).
- /uni25CF A bloodstained discharge may be caused by a duct papilloma, carcinoma or duct ectasia. A duct papilloma is usually single and situated in a major milk duct usually within 5 cm from the nipple.
- /uni25CF A black, green or muddy-coloured discharge is usually the result of duct ectasia. Galactorrhoea is defined as spontaneous milk discharge from several ducts of both nipples unassociated with childbirth or breastfeeding. It may be associated with a prolactin-secreting adenoma of the pituitary gland. Many drugs can also lead to increased prolactin secretion and galactorrhoea, including haloperidol, chlorpromazine, amitriptyline, metoclopramide receptor antagonists (cimetidine). and H 2

Summary box 58.2 Discharges from the nipple

*in situ*

Management Triple assessment to exclude carcinoma should be carried out. Ultrasonography may reveal dilated subareolar ducts and a

Geoffrey John Hadfield , 1923–2006, surgeon, Stoke Mandeville Hospital, Aylesbury , UK. Alfred Poland , 1822–1872, surgeon, Guy's Hospital, London, UK, described this condition in 1841. filling defect indicating a duct papilloma with a diagnostic accuracy of 85%. Ductoscopy (inspection of the internal structure of the duct system) using microendoscopes is technically feasible. Ductography is currently not practised in most centres because of the poor diagnostic yield. Most breast clinics have abandoned the cytological examination of nipple discharge as it has a poor yield for cancer. Non-bloody discharge Simple reassurance may be sufficient. However, if the discharge is profuse (wetting of the clothes causing social embarrassment) an operation to remove a 1.5- to 2-cm length of the affected major milk duct (microdochectomy) or ducts (major duct excision) can be performed. Blood or serous discharge The risk of cancer is related to the patient's age. Patients below 40 years with a bloody discharge and normal triple assessment may be reassured and followed up with annual imaging. Patients over the age of 40 years should be offered microdochectomy for single-duct discharge or Hadfield's major mammary duct excision for multiduct discharge. A segment of major milk ducts 5 cm in length from the nipple is usually removed as most duct papillomas are located up

to a distance of 5 cm from the nipple ( 58.4 ).

(d) Figure 58.20 Different types of nipple discharge. (a) serous; (b) pus; (c) bloody; (d) cheesy; (e) greenish; (f) watery. Discharge from a single duct Bloodstained Intraduct papilloma Intraduct carcinoma Duct ectasia Serous (sticky translucent fluid) Duct papilloma Ductal hyperplasia Duct ectasia Ductal carcinoma ( and invasive) Discharge from more than one duct Bloodstained Carcinoma Duct ectasia Black, green or muddy Duct ectasia Purulent Periductal mastitis Milk Lactation Galactorrhoea Rare causes: hypothyroidism, pituitary tumour Discharge from the surface (not from within nipple) Paget's disease Skin diseases (eczema, psoriasis) Rare causes (e.g. chancre) (e) (f)

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