ASSOCIATION OF BREAST SURGERY

Association of Breast Surgery Summary Statement

GUIDELINES FOR THE INVESTIGATION AND MANAGEMENT OF SPONTANEOUS NIPPLE DISCHARGE IN THE ABSENCE OF A BREAST LUMP

BACKGROUND

Nipple discharge in the absence of a palpable breast mass:

- Accounts for up to 5% of referrals to breast surgical services
- Is a poor indicator of an underlying malignancy (incidence of occult malignancy around 3%)
- Benign papilloma is the commonest mass lesion associated with nipple discharge

HISTORY & EXAMINATION

Bilateral multiduct discharge

In women of child bearing age most likely cause is:

- Benign physiological secretions (whitish discharge) or
- Periductal mastitis / duct ectasia (green/dark/black discharge) (especially in cigarette smokers)

In postmenopausal women most likely cause is:

- Duct ectasia

Single duct discharge

- Of any colour/ type at any age requires careful assessment

Galactorrhoea due to hyperprolactoneamia

- Is commonly drug related – e.g. antidepressents, antipsychotics
- May be seen in hypothyroidism (increase in thyrotrophin releasing hormone)
- Rarely due to a pituitary adenoma

Bloody discharge during pregnancy

- The epithelial proliferation that occurs during the 2nd and 3rd trimesters can often lead to "physiological" bloody nipple discharge[1].
- In the absence of any concurrent clinically concerning findings patients should be reassured. They can be clinically re-evaluated 2 month post partum[1].

continued...

SUMMARY STATEMENT:
NIPPLE DISCHARGE

INVESTIGATIONS

Radiology

- Mammogram / ultrasound scan as per flow diagram (Diagram 1)
- MRI may be considered in selected cases of high clinical suspicion (e.g. persistent bloody discharge, strong family history) but normal routine radiology[2]

Nipple cytology (NC)

- There is very wide variation in reported accuracy of NC but it has a high false positive rate papillary lesions or malignancy (e.g. 133-17%4, but up to 32%[5])
- The specificity is higher than the sensitivity but NC is a poor predictor of histological diagnosis
- NC is not recommended in the assessment of patients with nipple discharge[3, 4, 6]

MANAGEMENT

See Diagram 1.

Authors:	Clinical Practice & Standards Committee of the Association of Breast Surgery
Produced:	January 2019
Version:	1

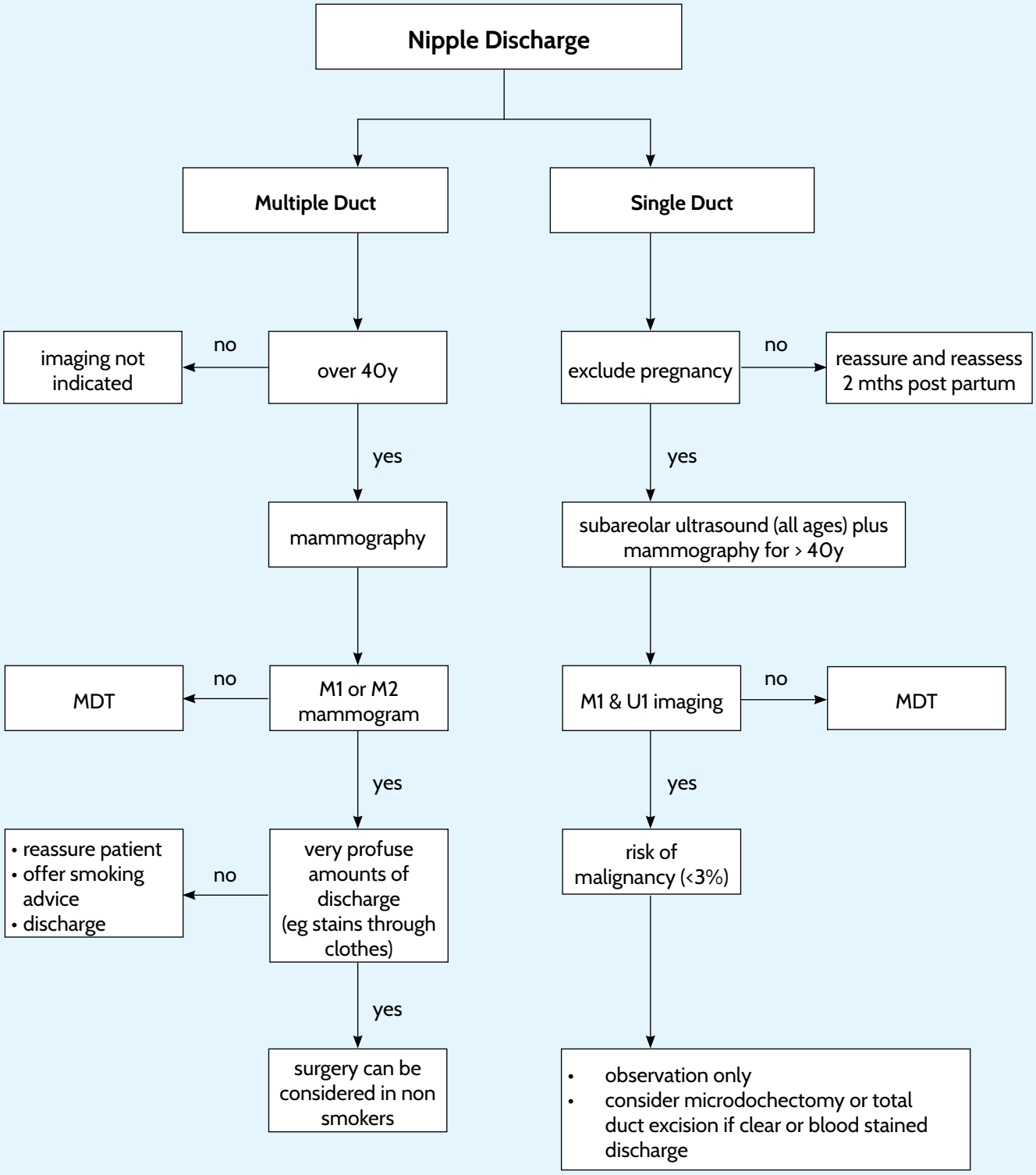
REFERENCES

1. The diagnosis and management of breast problems during pregnancy and lactation. Scott-Conner CE, Schorr SJ. Am J Surg. 1995 Oct;170(4):401-5.
2. Diagnostic Utility of MRI After Negative or Inconclusive Mammography for the Evaluation of Pathologic Nipple Discharge.Bahl M, Gadd MA, Lehman CD. Am J Roentgenol 2017; 209(6):1404-1410
3. Cytology of spontaneous nipple discharge-is it worth it? Performance of nipple discharge preparations in the College of American Pathologists Interlaboratory Comparison Program in Nongynecologic Cytopathology. Moriarty AT, Schwartz MR, Laucirica R, Booth CN, Auger M, Thomas NE, Souers RJ. Arch Pathol Lab Med. 2013; 137(8):1039-42.
4. The diagnostic value of nipple discharge cytology in 618 consecutive patients. Kooistra BW, Wauters C, van de Ven S, Strobbe L. Eur J Surg Oncol. 2009 Jun;35(6):573-7.
5. The diagnostic value of nipple discharge cytology: breast imaging complements predictive value of nipple discharge cytology. Kalu ON, Chow C, Wheeler A, Kong C, Wapnir I. J Surg Oncol. 202;106(4):381-5.
6. Nonsurgical evaluation of pathologic nipple discharge Simmons R, Adamovich T, Brennan M, Christos P, Schultz M, Eisen C, Osborne M. Ann Surg Oncol. 2003;10(2):113-6.

continued...

SUMMARY STATEMENT:
NIPPLE DISCHARGE

Diagram 1: ABS Algorithm for the Assessment and Management of a Woman with Nipple Discharge in the Absence of a Palpable Breast Lump



Ashfaq A et al. Validation of a modern treatment algorithm for nipple discharge. Am J Surgery 2014, 208, 222-227