BREAST PROBLEMS

Asymptomatic clients

- Offer advice on breast awareness. Women should be encouraged to become aware of the feel and shape of their breasts, and to report any change from normal.
- Signpost the patient to information e.g.https://www.nhs.uk/common-health-questions/womens-health/how-should-i-check-my-breasts/ (accessed 12/10/21)
- Concerns re family history of breast cancer.
  Obtain a full history, including all family members affected by breast or ovarian cancer and age at diagnosis.

Practice point:

90-95% breast cancer occurs by chance, where AGE is the main risk factor.

5-10% due to an inherited predisposition (genetic mutation in an inherited gene)

BRCA gene mutation most likely in families where 4 or more cases breast cancer and ovarian cancer in close relatives, usually diagnosed <60 yrs and over three generations.

BRCA gene mutation testing requires blood from an affected living relative with breast or ovarian cancer to identify which gene fault is present.

West of Scotland Genetics Service: Breast Cancer Referral Criteria[1, 2]

(Supplied by Catherine Watt, Principal genetic counsellor, West of Scotland Genetic Services at the Queen Elizabeth University Hospital – for more information 0141-354 9200)

Patients diagnosed with cancer who are eligible for mutation analysis of a panel of genes associated with cancer, which includes BRCA1, BRCA2 and TP53 are:

- Breast cancer diagnosed <40
- Bilateral breast cancer <60
- Triple negative breast cancer <60
- Male breast cancer at any age.
- Two first degree relatives, both with breast ca <45
- Patients with 10% chance of a mutation (Manchester score ≥15 – see Appendix 1)
- All non-mucinous epithelial ovarian cancer.

A blood sample can be taken for storage for future discussion around testing with genetics.
For borderline score patients store blood sample and refer patient to clinical genetics.

Testing requires x1 4ml EDTA blood sample (purple top vacutainer) with the Hereditary Cancer Panel testing form available at: https://www.nhsggc.org.uk/media/255470/pre-68-woscgm_pf_hc_ngs.pdf.

Send samples to: Duty Scientist, L2/B Laboratory Genetics, Laboratory Medicine QEUH, Glasgow, G51 4TF. Any queries contact the cancer genetics team on 0141 354 9201 or email cancer.genetics@ggc.scot.nhs.uk

Note:

- Also refer for consideration of BRCA 1 & BRCA 2 mutation analysis in families where there is a "Manchester score" of ≥15. Please see appendix.
- Additional breast screening for women at increased risk does not usually start until the age of 35 sometimes 40 years depending on the family history.
- E.g. if you are seeing a 19 year old girl about contraception who falls into the moderate risk category for breast cancer and are considering offering a genetics appointment it would only be to discuss risk. Patients often arrive with the expectation that they automatically will be offered breast x-rays and genetic testing.
- If making a genetics referral it is best to explain to the patient that genetics will confirm the diagnoses of cancer and the familial risk. Many patients confuse cervical cancer with ovarian cancer.

Criteria and patient leaflets available from Staffnet. Search → Clinical Genetics → Cancer Referral Criteria.[1]

Symptomatic clients

- Most will present with a suspected breast lump, although breast tenderness and nipple discharge are often noted. These women should be examined by yourself or a colleague who is competent in breast examination.
- Indications for referral are listed in the table below. Women should be referred directly to their local hospital breast clinic (New Stobhill, New Victoria Infirmary, Gartnavel General, Royal Alexandra Hospital, Vale of Leven and Inverclyde). Inform her GP of this referral. Urgent referrals should be processed through SCI gateway to the relevant department, ensuring all correspondence is on NASH. The woman should contact us if she had not been contacted by the clinic within 2 weeks of an urgent referral so that we can chase up the referral.
- Breast tenderness and pain (mastalgia) may be cyclically related and if so hormonal medication could be discussed. Current evidence would suggest no proven benefit of Evening Primrose Oil although it is still available in pharmacies and health food shops for those who wish to take it.
- Women with galactorrhoea should have pregnancy excluded and serum prolactin levels checked. Some medication is known to stimulate milk production including hormonal contraception and some SSRI antidepressants. If a raised prolactin level is confirmed (test repeated and macroprolactin excluded), discuss with senior colleague and consider referral to an endocrinologist.
- If the findings are normal the woman should be reassured but advised to see her GP if symptoms persist.

Indications for Referral to Breast Clinic (Scottish Cancer Group Referral Guidelines[3])

	Urgent suspicion of cancer	**Routine referral**	**Primary care management** **Issue relevant advice leaflet**
Lump	• Any new discrete lump (in patients over 30 years) • New asymmetrical nodularity that persists at review after 2 to 3 weeks (in patients over 35 years) • Unilateral isolated axillary lymph node in women persisting at review after 2-3 weeks • Cysts persistently refilling	• Any new discrete lump in patients under 30 years with no other suspicious features • New asymmetrical nodularity that persists at review after 2-3 weeks (in patients under 35 years)	• Women with longstanding tender lumpy breast and no focal lesion • Tender developing breasts in adolescents

Nipple Symptoms	• Bloodstained discharge • New nipple retraction • Nipple eczema if unresponsive to topical steroids (such as 1% hydrocortisone) after a minimum of 2 weeks	• Persistent discharge sufficient to stain outer clothes	• Transient nipple discharge which is not bloodstained Check prolactin levels when discharge present • Longstanding nipple retraction • Nipple eczema if eczema present elsewhere
Skin Changes	• Skin tethering • Fixation • Ulceration • Peau d'orange		• Obvious simple skin lesions such as sebaceous cysts
Abscess/ Infection	• Mastitis or breast inflammation which does not settle after one course of antibiotics		• Abscess* or inflammation– try one course of antibiotics to cover staphylococcus and streptococcus (also consider possible anaerobic infection as per local guidelines)
Pain		• Unilateral persistent pain in post menopausal women • Intractable pain that interferes with the patient's lifestyle or sleep	• Women with moderate degrees of breast pain and no discrete palpable lesion
Gynaecomastia		• Exceptional aesthetics Referral to plastic surgery pathway if required • Exclude or treat any endocrine cause prior to referral	• Examine and exclude abnormalities such as lymphadenopathy or evidence of endocrine condition • Review to exclude drug causes
Breast Implants		• If appropriate refer to the service that first inserted the implant. (Usually plastic surgery)	• Reassure

References

1. West of Scotland. Clinical Genetics http://www.staffnet.ggc.scot.nhs.uk/Acute/Diagnostics/All%20Laboratory%20Medicine/Medical%20Genetics/Clinical%20Genetics/Pages/Cancer%20Referral%20Criteria.aspx [accessed 09/11/21]
2. NHS Familial Breast Cancer Report. June 2014. Available from: http://www.healthcareimprovementscotland.org/our_work/cancer_care_improvement/programme_resources/familial_breast_cancer_report.aspx [accessed 09/11/21]
3. Scottish Cancer Group. Scottish referral guidelines for suspected cancer. February 2019. http://www.cancerreferral.scot.nhs.uk/breast [accessed 09/11/21]

Appendix: NHS criteria for analysis of breast cancer 1 (BRCA 1) gene and breast cancer 2 (BRCA 2) gene.

We require a blood sample from a living affected relative.

Appendix 1	BRCA 1 & 2 score
Female (relative) breast cancer < 30 years	11
Female (relative) breast cancer 30 – 39 years	8
Female (patient or relative) breast cancer 40 – 49 years	6
Female (patient or relative) breast cancer 50 – 59 years	4
Female (patient or relative) breast cancer > 59 years	2
Triple negative breast cancer (patient >59yrs)	8
Male (relative) breast cancer < 60 years	13
Male (relative) breast cancer > 59 years	10
Ovarian cancer < 60 years (relative)	13
Ovarian cancer > 59 years (relative)	10
Pancreatic cancer (patient or relative)	1
Prostate cancer < 60 years (patient or relative)	2
Prostate cancer > 59 years (patient or relative)	1
Total Score for Family = _____ Manchester scores ≥15 then eligible for genetic testing Please note: Ashkenazi Jewish ancestry is associated with increased likelihood of BRCA mutations.	

Please note a score of 15 equates to only 10% likelihood of there being a gene fault.

(table supplied by Catherine Watt, Principal genetic counsellor, West of Scotland Genetic Services at the Queen Elizabeth University Hospital – for more information 0141 354 9200)