Familial cancer guidelines

Cancer genetics referral guidelines

The following family histories are suggestive of an inherited cancer predisposition and would be appropriate for referral. This list is a guide only, and is not comprehensive. If you are unsure whether to refer, please telephone 01223 216446 between 9am and 5pm and speak to the on-call team.

- Referrals can be made for individuals affected by cancer or for their close relatives. If possible, refer the affected person in the first instance.
- Close relatives are father/mother, brother/sister and son/daughter.
- Affected relatives must be close relatives of each other, through either the maternal or the paternal side.
- In breast/ovarian cancer families, women related through unaffected men are considered close relatives (ie a paternal family history may still be significant).
- Few families have a mutation in a known cancer gene. For many it will not be appropriate to offer genetic testing.
- In general, a living relative affected by cancer is tested prior to offering testing to unaffected family members. This maximizes the chance of finding the family gene mutation if one exists.
- Not all individuals referred will be eligible for additional screening.
- Not all individuals referred will be offered a clinic appointment; some may receive a risk assessment by letter.

Breast/ovarian cancer families

- Breast cancer under 40
- Grade 3 triple negative breast cancer under 50
- Two cases of breast cancer (including bilateral breast cancer), average under 50
- Three cases of breast cancer, average under 60
- Four or more cases of breast cancer
- Male breast cancer at any age plus breast cancer (male or female) under 60
- Breast cancer and ovarian cancer in a single individual
- High grade serous papillary ovarian cancer under 60
- Ovarian cancer at any age plus breast cancer under 60
- Two or more cases of ovarian cancer
- A woman with Ashkenazi Jewish ancestry and any family history of breast or ovarian cancer

- Families in whom a BRCA1 or BRCA2 mutation has been identified

Colorectal cancer families

- Colorectal cancer under 50
- Two cases of colorectal cancer, average under 60
- Colorectal cancer plus one gastrointestinal, endometrial, ovarian, renal or urinary tract cancer, average under 60
- Three or more cases of gastrointestinal, endometrial, ovarian, renal or urinary tract cancers
- Multiple gastrointestinal polyps
- Families in whom a Lynch syndrome (HNPCC) or familial adenomatous polyposis (FAP) mutation has been identified

Prostate cancer families

- Prostate cancer under 60
- Two cases of prostate cancer, at least one under 65
- Three or more cases of prostate cancer
- Prostate cancer under 70, with a strong family history of breast/ovarian cancer

Pancreatic cancer families

- Pancreatic cancer under 50
- Pancreatic cancer with a previous malignancy (eg breast cancer)
- Two or more cases of pancreatic cancer at any age

Other families

- Three or more primary cancers in a single individual
- Three or more cases of cancer at the same site
- Any two of: sarcoma, breast cancer, brain tumour, leukaemia or adrenal cortical tumour, one under 45
- Childhood cancer plus one close relative with cancer
- Any individual or family with an unusual pattern of cancer e.g rare tumours or young ages at diagnosis
- Families with a known cancer predisposition syndrome e.g. Li-Fraumeni, MEN1,

MEN2, Von Hippel-Lindau

Breast and ovarian cancer guidelines

Approximately 1 in 8 women in the United Kingdom develop breast cancer over their lifetime, and around 5-10% of these have a hereditary cause.

All women are eligible for 3-yearly mammography in the NHS Breast Screening Programme and will be called for their first mammogram between the ages of 47 and 50. For women with a strong family history of breast and ovarian cancer, additional screening is recommended.

Referral for additional screening is only made following accurate assessment of family history, please see **referral guidelines** and documents below.

Genetic testing for BRCA1 and BRCA2 is only appropriate in a small number of families, and usually begins in a relative who has been affected by breast or ovarian cancer. Testing is currently offered when there is a >10% chance of finding a mutation, please see document below..

Colorectal cancer guidelines

Approximately 1 in 20 people in the United Kingdom develop colorectal cancer (CRC). Five to 10% of CRCs are due to an underlying genetic condition. The two most common genetic conditions associated with a significantly increased risk of CRC are familial adenomatous polyposis (FAP) and Lynch syndrome (hereditary non polyposis colonic cancer, HNPCC).

In FAP the risk of CRC is up to 100% and in Lynch syndrome the risk is up to 80%. Identification of those with these two conditions allows cost effective screening and a reduction in cancer related morbidity and mortality.

There are also a number of rare conditions and genes leading to a moderately increased risk of CRC for which it may be possible to offer genetic testing and/ or additional screening.

For more information download the guidelines below.