Cancer is a common disease that affects 1 in 3 individuals. It is not uncommon to see more than one person in a family with cancer. Ovarian cancer is less common, affecting 1 in 80 women. Most, 90-95%, is sporadic and occurs by chance. It is likely that only 5-10% of the disease occurs because of an inherited predisposition, and it is mainly in these families where there may be an increased risk to relatives.

In families where there is an inherited predisposition cancer tends to occur at a younger age; the same type of cancer may affect several family members; there may be a combination of ovarian cancer and breast cancer or less commonly bowel cancer; an individual may have two different cancers. There is no easy way at present to be sure whether cancer in a family is genetic or not, and we are mainly guided by the number of people in the family who have had cancer, and at what ages it developed.

From your family history we would consider you to be at higher risk of developing ovarian cancer. That is, we feel it is likely there is a predisposition gene running in your family which would increase the risk of developing ovarian cancer, or breast and ovarian cancer. The chance that you inherited this gene may be up to 50%, but as not everyone who inherits one of these genes would develop cancer, the chance of developing ovarian cancer would usually be lower than this.

Screening for ovarian cancer, in the hope of early detection, is still being studied. This is currently attempted by a combination of ultrasound scanning and blood tests, but both of these tests can give apparently abnormal results which are not in any way related to ovarian cancer. You would be eligible to take part in the study, which would involve an ultrasound scan of your ovaries once a year, and a blood test for a protein called CA125 which is repeated three times a year. The results of these would be analysed along with those of women around the country, in the hope of giving us more information as to how useful this is. The potential disadvantages of the screening are the finding of apparent abnormalities which may lead to anxiety and even surgery to remove the ovary, which might eventually turn out to have no serious abnormality. The other problem is that the screening may not actually detect the cancer early enough to make any difference.

Sometimes, women who have completed their families feel that, rather than embark on screening, they would prefer to have their ovaries removed which would reduce, though not abolish, the risk of developing ovarian cancer. If the women are still premenopausal, they would be advised to take HRT to protect their heart and bones. This often raises concerns about breast cancer, as HRT does increase the risk a little. However, it does so when HRT is taken after the menopause, and when taken in these circumstances at least up to age 50, the breast cancer risk is not thought to increase. For some families, screening for breast or other cancers would also be offered.

At present there are 2 genes known which can cause a predisposition to ovarian and breast cancer. These are BRCA1 and BRCA2. If families want to consider genetic testing we need a blood sample from somebody in the family who has had breast or ovarian cancer. We would then look for an alteration in 1 of these 2 genes, and if nothing is found we would store the sample in the hope of doing further testing in the future if more genes become known. It is not possible at present to detect all families with a predisposition gene fault, as not all the genes which can cause ovarian cancer have yet been identified.

If a gene fault is identified then it is possible to offer a test to unaffected family members. Testing for a gene fault has many implications for different family members and should be considered carefully.

Possible protective factors are not yet fully understood, but having children young, and
breast feeding, are protective to some extent. The oral contraceptive pill also reduces the risk significantly, and HRT does not appear to have any effect either way on the ovarian cancer risk. A diet high in fresh fruit, vegetables and fibre, not too much fat, regular exercise, moderate alcohol and avoiding obesity are all associated with lower risks of cancer. Some people who do all these things still get cancer so there is no way of being certain of avoiding the disease.

If you have any further questions or you would like another appointment to discuss any of the points raised please contact:

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