Familial Bowel Cancer

MODERATE RISK

Cancer is a common disease that affects 1 in 3 individuals. Bowel cancer is also fairly common, affecting 1 in 25 people. It is not uncommon to see more than one person in a family with bowel cancer but 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 bowel cancer with other cancers such as womb or ovary; and an individual may have more than one bowel tumour. 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 moderate risk of developing bowel cancer. This is because there are several people who have been affected in your family, or that the 1 or 2 who have been affected have been younger than usual. Thus there is some suspicion that there could be a predisposition gene in your family, but it could also have been due to chance.

This means that your own risk of developing bowel cancer is increased a little, but not so high as it would have been if we had been convinced of a bowel cancer gene in the family. At present, we would suggest you may wish to have bowel screening, but because this in itself carries small risks we do not think you need to have it carried out too regularly. We suggest a colonoscopy examination of your bowel at around 35 years of age, with another at around 55 years of age. If these are both normal, the chance of your developing bowel cancer is reduced further. You should still report any worrying symptoms to your GP, and get back in touch with the genetics department should there be any change in your family history.

You may have wondered whether a genetic test was possible in your family, even though we are not sure whether there is a predisposition gene in your family. If there was a test which could prove the bowel cancer was not genetic, this might be helpful. Unfortunately this is not possible. At present there are at least 5 genes known which can cause a predisposition to bowel cancer. Even if we tested your family for all these genes, it would not in fact be possible to prove that the bowel cancer was not genetic as we know there are a number of other bowel cancer genes which have not yet been found and for which we cannot test. However, in some families it is possible to test for the known bowel cancer genes, as if an abnormality is found, then people who are so far unaffected in the family can be offered a test to see whether they have inherited the gene or not. In order to do this testing, a blood sample from somebody who has had bowel cancer or a related cancer is needed. It may also be helpful to do genetic testing on the bowel tumours which have occurred in the family, and this can sometimes help clarify whether an altered gene is likely or not.

Possible protective factors are not yet fully understood, but a diet high in fresh fruit, vegetables and fibre without too much fat, regular exercise, moderate alcohol and avoiding smoking 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.

There is research ongoing looking at other factors in the diet, or drugs, which might reduce the risk of bowel cancer. It is also hoped that there will be easier ways of identifying which families do carry a predisposition gene in the future.
If you have any questions or you would like an appointment to discuss any of the points raised please contact:

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Familial Bowel Cancer
Moderate Risk Families

Information Leaflet