



**Birmingham Women's
and Children's**
NHS Foundation Trust

An information leaflet for patients
and families

Diffuse Gastric Cancer



By your side

Cancer in the family

Sadly, cancer is now very common. Around one in two people will develop cancer in their lifetime. As a result most people will have some cases of cancer in the family. In most cases other family members are not at increased risk of cancer.

Stomach cancer in the family

Most cases of stomach cancer are not inherited. In particular the commonest form of stomach cancer (also known as “intestinal” stomach cancer) does not generally run in families.

There is a rarer form of stomach cancer known as “diffuse” stomach cancer. If there have been a number of cases of diffuse stomach cancer in a family this can be relevant to other family members.

Is the cancer in my family inherited?

The genetics team will assess your family history to see if the cancers in your family might be inherited. You may be offered a clinic appointment to discuss this in more detail.

Is my own risk of developing cancer increased?

Your genetic professional will assess your family history, and explain how this affects you.

How is stomach cancer inherited?

In some families there is an inherited tendency to develop stomach cancer.

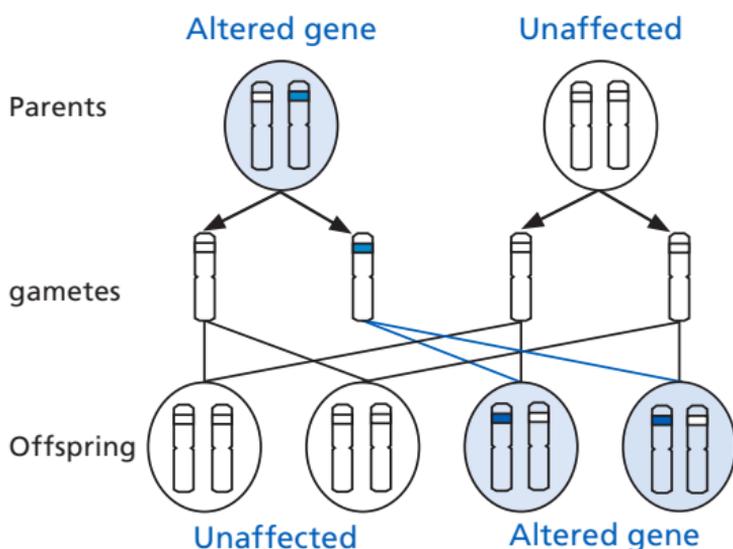
In a small number of families there is a gene change running in the family, which carries with it a very high risk of developing diffuse stomach cancer.

Some families have a change in a gene called CDH1 (or E-Cadherin). There are likely to be other such genes we have not yet discovered.

How are gene alterations inherited?

Gene alterations can be passed from parent to child. We have two copies of each of our genes. An alteration in only one copy of CDH1 greatly increases the chance of developing diffuse stomach cancer.

Each time we have a child we pass on one or other copy of each gene at random. Therefore someone with an altered gene has a 1 in 2 (50%) chance of passing on their normal copy of the gene, and a 1 in 2 (50%) chance of passing on the altered copy of the gene.



Can I have a genetic test?

In a small number of families it may be possible to test for a CDH1 gene change in a blood sample. This testing must in the first instance be performed in someone who has

had stomach cancer. If a gene alteration is found in an affected person, it is usually possible to offer genetic testing in other adult family members.

Should I be having any screening?

In some families screening for gastric cancer may be recommended. This involves an endoscopy (camera examination) to look at the stomach. Tiny tissue samples can be taken from the stomach to look for any changes which might lead to cancer.

The benefit of this screening is not yet proven. Your genetic professional will discuss this with you in more detail.

Should I consider surgery?

Carriers of a CDH1 alteration have a very high chance of developing stomach cancer. Even with screening it is possible these cancers might not be detected early. Therefore such individuals may wish to consider an operation to remove the stomach (gastrectomy).

This is a serious operation, but is the most reliable way to reduce the risk of cancer. This will be discussed with you in more detail if it is relevant to your family following the identification of a CDH1 mutation.

Breast cancer risk

Women who inherit a CDH1 alteration also have increased risk of developing breast cancer and additional regular breast screening is recommended. Also being breast aware and reporting any changes that fail to heal to your GP is advised.

What should I do if someone else in my family gets cancer?

If anyone else in the family develops any cancers please let us know. This may not alter your risk of developing cancer. However, it is important that you check with us that this does not change our advice, or enable genetic testing which might not previously have been possible.

What can I do to reduce my risk?

There is evidence that leading a healthy lifestyle can help to reduce the risk of cancer. In particular, a balanced diet combined with regular exercise is recommended, although the precise role of these factors in modifying the risk of cancer is not known. Not smoking and reducing alcohol is a good idea, in line with general health advice.

What about my children?

If you remain healthy and cancer free, then your children will often not be at increased risk of cancer. In certain families genetic testing or screening might still be useful for adult children.

How can my family members get advice?

Family members can contact us to discuss their risk, or ask their GP to refer them to their local genetics centre. We can share the information we have with their genetics centre if you wish.

Useful Websites

www.cancerresearchuk.org
www.macmillan.org.uk/Home.aspx

If you need more advice please contact:

**West Midlands Family Cancer Service
Clinical Genetics Unit**

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Author: Clinical Genetics unit
Reviewed and updated: June 2017
Next review: June 2020
Ref No: CG14/GaC

