

Linking cancer with genetic faults

Rare DNA faults in two genes have been strongly linked to bowel cancer

Research led by Professor Ian Tomlinson, at the Wellcome Trust Centre for Human Genetics at Oxford University, UK has revealed that rare DNA faults in two genes, viz. POLE and POLD1 are strongly related to bowel cancer in human. POLE and POLD1 are genes involved in processes that repair damage to DNA. Without these genes functioning properly, affected individuals can build up damage in their DNA which accumulates and it is thought this may lead to changes that cause bowel cancer.

The study involved 4000 people with bowel cancer and 6700 people without disease. Neither of the genetic faults was found in people in control group without bowel cancer. In other group comprising of bowel cancer patients, 12 were found to have fault in the POLE gene and one had a POLD1 gene fault. POLD1 fault was also found to increase the risk of getting womb cancer and possibly brain cancer. By testing people with strong family history of the disease , members can be identified who are at high risk of developing cancer and try to prevent the disease by using colonoscopy and other methods..

Source of information

<http://www.sciencedaily.com/releases/2012/12/121230175927.htm>

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