Hereditary Cancer Program of British Columbia

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http://www.dreamstime.com/stock-photos-double-helix-dna-strand-image10404453

Overview

1. The Hereditary Cancer Program
2. Criteria for referral
3. Method of assessment and counselling
4. Usage of the Program

Do I/ my relatives have an increased risk of cancer?

How should we manage the risk?

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http://partnership.education.manchester.ac.uk/documents/report_with_words_and_pictures.htm

Aims

- Cancer morbidity and mortality
- Effectiveness of genetic testing by focusing its use
- Reduce the utilization of unnecessary medical procedures and the attendant anxiety

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The Service

- Multidisciplinary team
- Offices in Vancouver and Abbotsford
- Outreach in Kelowna, Surrey, Victoria, occasionally other
- Videoconference

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Predictors of risk

- Gene mutations
- Features in the individual
- Family history

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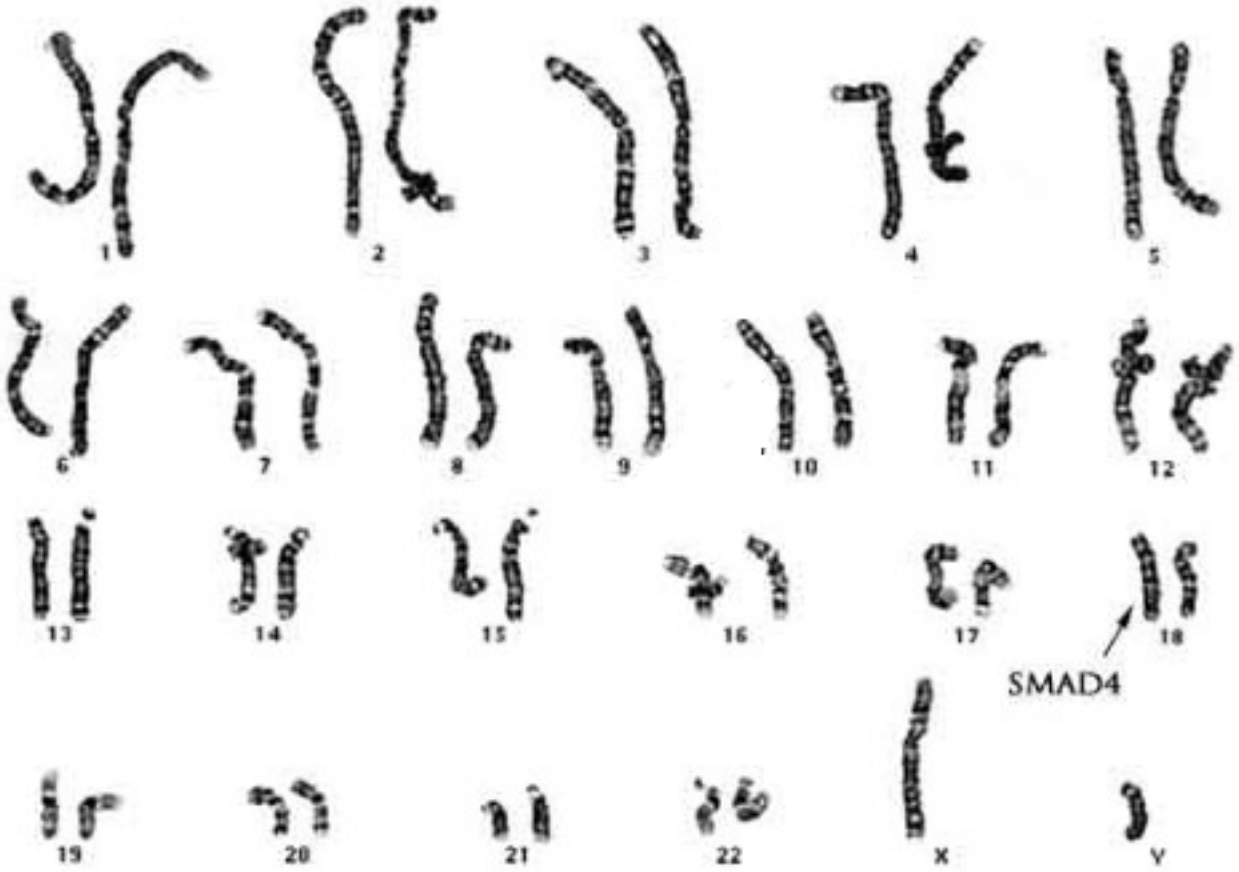

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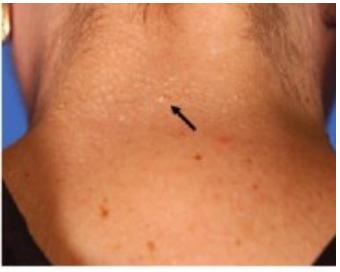

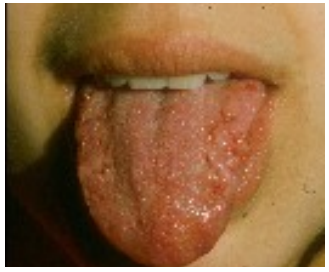

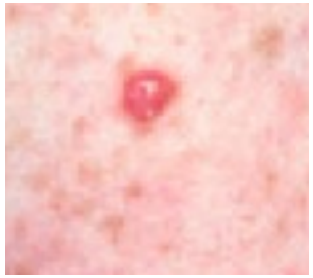

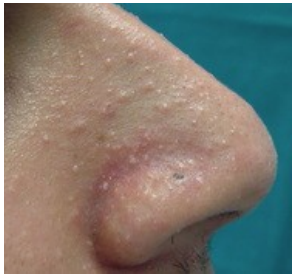

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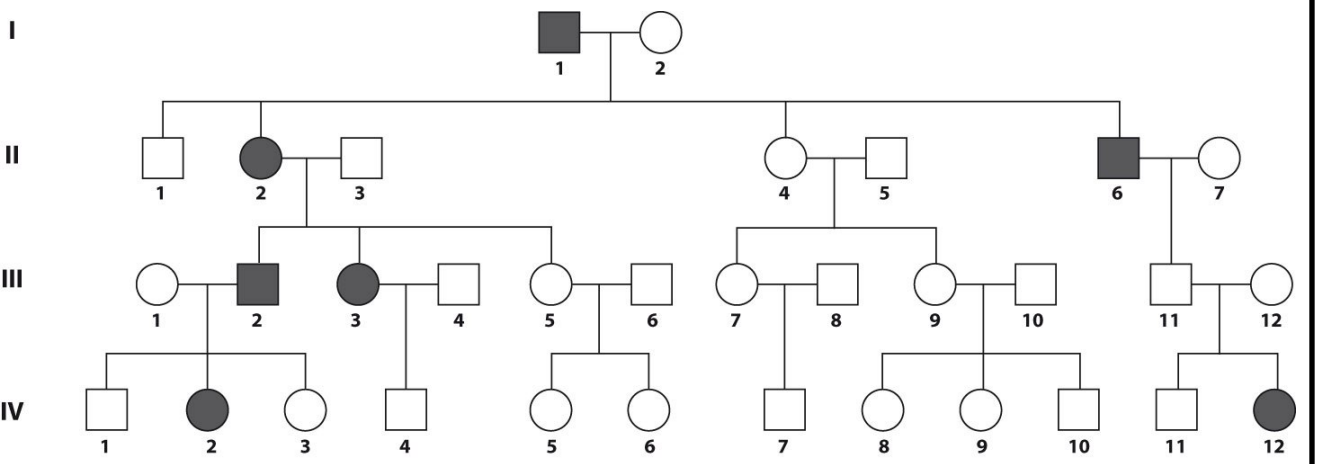
http://www.nature.com/eihg/journal/v16/n11/fig_tab/ej hg2008162f2; gneclinics.html#figure2
titlehttp://www.childrensomaha.org/body.cfm?id=1251



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http://www.bccancer.bc.ca/HPI/CancerManagementGuidelines/HereditaryCancerProgram/default.htm

Lynch Syndrome

1. Carrier testing
2. Isolated CRC ≤40
3. Isolated case CRC≤50 with MSI
4. ≥2 Lynch primaries*, 1 being colon, 1 ≤50
5. 2 first degree relatives with Lynch primaries, 1 being colon, both ≤50
6. ≥3 Lynch primaries, 1 being colon, 1 ≤50 and more than 1 generation affected

*Relevant Lynch syndrome-related diagnoses include: colorectal, endometrial, ovarian, gastric, small bowel, hepatobiliary, pancreatic, kidney, ureter or brain cancers, colorectal adenomas < age 40 or sebaceous adenomas

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The Process

- Referral criteria on web site
- Triage by nurse
- Appointment
- Testing may be offered to an affected member
- Recommendations for risk management/ High risk breast clinic for ongoing surveillance

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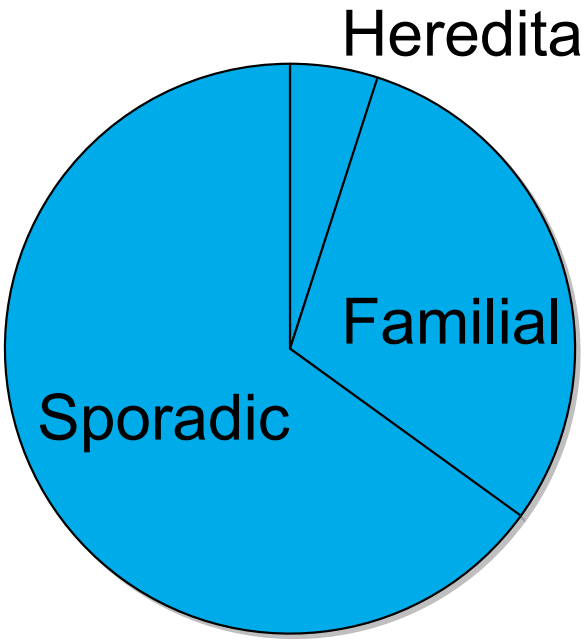

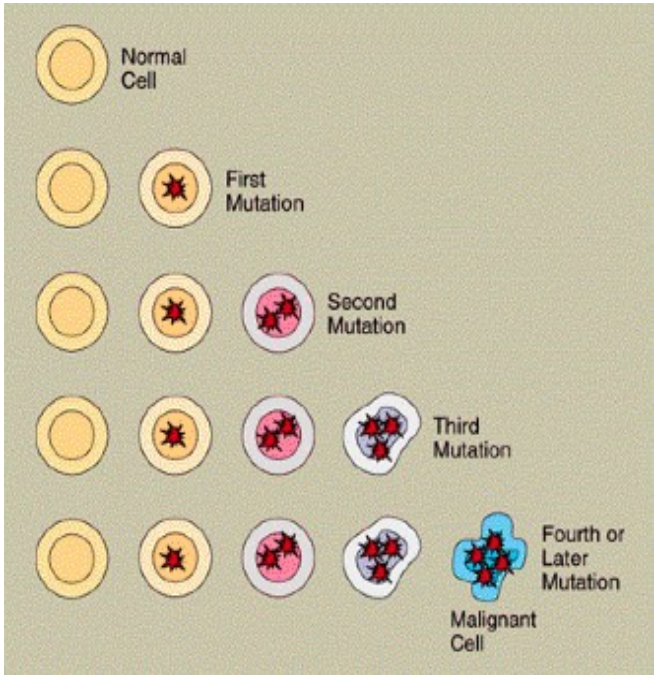

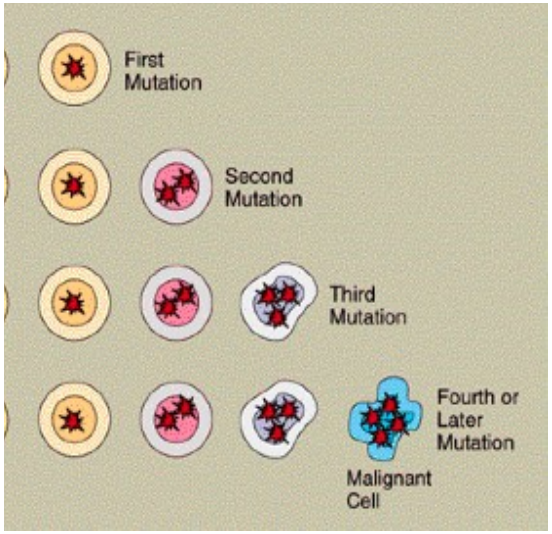

http://www.sonoma.edu/users/t/thatcher/biol518/present3-19c.htm

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Program reports

- Cremin CM, Armstrong L, Gill S, Huntsman D, Bajdik C. The identification of Lynch syndrome in British Columbia. Can J Gastroenterol. 2009 Nov;23(11): 761-7.
- Monzon JG, Cremin C, Armstrong L, Nuk J, Young S, Horsman DE, Garbutt K, Bajdik CD, Gill S. Validation of predictive models for germline mutations in DNA mismatch repair genes in colorectal cancer. Int J Cancer. 2010 Feb 15;126(4): 930-9.
- http://www.bccancer.bc.ca/NR/rdonlyres/ADE74871-6D06-47B7-AF37-370DAACF49C1/51081/CRCunder50.pdf
- HCP Annual report 2011

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Colorectal cancer under 50

June 1, 2008 – August 30, 2009

169 cases referred to BCCA*	50 HCP referral criteria group	109 Incident group
Counselling completed	37/50 (1 declined)	
MSI utilization rate	25/37 = 67%	28/109 = 26%
MSI rate	48%	18% (5 MSI-L, 1 MSI-H)
Mutation found	5	0

*An additional 103 non-referred cases were identified from the BC Cancer Registry but are not included in this preliminary report

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Thank you