

GENETICS SCREENING CASE

Case #1



Genetics Screening Case

Scenario 1

A 35-year-old woman is diagnosed with node positive, ER/PR negative, Her2Neu 3+ breast cancer. She has two young children and wonders whether she should have genetic testing. On reviewing her family history her maternal grandmother was diagnosed with breast cancer at age 50 and is alive and well. Her paternal aunt is undergoing treatment for ovarian cancer.

- 1. Should this woman be offered genetic counseling/testing? If so, why?
- 2. Does it make a difference whether the relatives with cancer are on her maternal or paternal side?

Scenario 2

The daughter of a 65-year-old breast cancer patient inquires about genetic testing. She is concerned about her personal risk for developing cancer given that there is a family history of multiple cancers on her maternal and paternal sides. Her mother was diagnosed with stage 1 breast cancer at the age of 52. A maternal aunt who was a heavy smoker died of lung cancer. Her maternal grandmother had a cancer of the "abdomen" diagnosed in her 80's and died shortly afterwards. A paternal cousin had colon cancer diagnosed at age 55 and his daughter (her first cousin) had polyps removed from the bowel.

- 1. What, if any significance exists to having multiple primary cancers in a family?
- 2. What are the more common "hereditary cancer syndromes"?
- 3. Would the significance of the family history be different if none of the diagnoses occurred in an individual under the age of 50?

Scenario 3

A 47-year-old man is diagnosed with a stage 1 right-sided breast cancer. There is no family history of cancer on either side of his family.

1. Should he be offered genetic counseling/testing?

Scenario 4

A 33-year-old Ashkenazi Jewish woman is diagnosed with a locally advanced breast cancer in the postpartum period. Her mother was diagnosed with breast cancer at age 49 and is alive and well. Her maternal grandmother was diagnosed with a stage 3 ovarian cancer at age 65.

- 1. Should this woman be offered genetic counseling/testing? If so, why?
- 2. Does her Jewish ancestry put her at increased risk of cancer? If so, which types?
- 3. If she was the first member of her family to be diagnosed with cancer, would you still consider her a candidate for genetic counseling? If so, on what basis?
- 4. If she wasn't Jewish, and had no family history of cancer, would you refer her for counseling/testing? Why? Why not?



L'ASSOCIATION CANADIENNE DES MÉDECINS OMNIPRATICIENS EN ONCOLOGIE

Scenario 5

A 53-year-old woman is diagnosed with bilateral breast cancer. There is no family history of cancer on the maternal or paternal side. She inquires about genetic counseling/testing.

- 1. Would you refer her for genetic counseling?
- 2. Does the age at which a patient is diagnosed with bilateral breast cancer influence whether they should be offered genetic counseling/testing?

Scenario 6

A 43-year-old woman is diagnosed with ovarian cancer. Her father was diagnosed with colorectal cancer at age 55. Her paternal grandfather died of pancreatic cancer at age 49. The patient has two young children. She is concerned that her children are at increased risk to develop cancer.

- 1. Are her concerns justified? Will the results affect her treatment options?
- 2. If so, what hereditary cancer syndromes should she be screened for?

Scenario 7

A 34-year-old male is diagnosed with colorectal cancer. He is otherwise healthy and there is no family history of cancer that he reports.

1. Does he warrant genetic counseling/testing? If so, why?

BACK TO CAGPO'S GPO TRAINING PROGRAM CASE LIST