Breast Cancer Genetic Risk

Communicating with Your Family

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Communication

Issues to Consider

- Who to tell
- When to tell
- What to tell
- How to deal with reactions
- How to deal with family dynamics
- Confidentiality
Genetic Mutations and Disease

- All of us have 4 or 5 genetic changes that may lead to disease
- Genes come in pairs. One working gene is good enough
- Over a lifetime genetic changes can knock out the working gene (Most disease occurs as we age)
- 5-10% are born with a gene mutation that will cause illness at an earlier age
Characteristics of Hereditary Breast Cancer

- Young age at onset
- Aggressive phenotype
- Triple negative profile (ER, PR, Her2/neu)
- Increased rate of interval cancers
- Association with ovarian, other cancers in the family
Family Patterns Identify Risk for Disease

- Same or similar type of disease from one generation to the next
- More than one family member with the same type of disease
- Disease happens at an earlier age than expected
- Precursor conditions (polyps, cholesterol, sugar)
Where You Can Get Information About Your Family’s Medical History

- Records
  - Military
  - Schools
  - Death Certificates
  - Medical records
- Genealogy records
Drawing a Family Tree for Your Family Health Story

- women
- men
- married
- child

Sisters & Brother
Shaded = disease
Line through - Passed/died
You

Father’s Father

Father’s Mother

Mother’s Father

Mother’s Mother

Father

Mother

You
Inherited BRCA1-2 mutations increase the risk of cancer more than other factors.

Relative risk of breast cancer:

- BRCA1-2 mutation: 12
- Early menarche, Late age at birth of 1st child, Benign breast disease, Hormone replacement therapy, Alcohol use, Family history: 1
Personal Risk for Disease

Environmental Factors

Biologic Aging

Genetic Factors

Lifestyle
Why is Our Family Story Such a Powerful Tool?

- Identify disease that may run in the family (high-risk)
- Help guard our health
- Something to tell your doctor
Familial Dynamics Effect

- Family organization
- Family beliefs
- Family communication process
- Patterns of coping
- Life cycle challenges
Some General Barriers to Information Exchange

- Lack of perceived usefulness
- Serious nature of the message
- Difficult or distant family relationships
- Reluctance to share upsetting or alarming information
- Fear of rejection
Why are Men Underrepresented in Conversations about \textit{BRCA1/2}?

1. Predominant cancers are female
   - Confusion about inheritance of female cancers through paternal side of the family
   - Lack of awareness of male breast cancer
   - Lack of awareness of other cancers in the syndrome
   - Fewer management strategies available
Why are Men Underrepresented in Conversations about \textit{BRCA1/2}?

2. Gender Differences in Health Roles
   - Women usually the caregivers in the family and are often responsible for the communication of health information
   - Women more likely to experience vulnerability to health threats
   - Men more likely to minimize health threats, perceive illness as a weakness, or use avoidance techniques