

How other diseases impact on cancer



Winning the fight against cancer, every day.®

Chronic Diseases

Are the “epidemic of the future”
And THE leading cause of death

Comorbidities

- Comorbidities are other medical ailments/ diseases that may impact on treatment decisions, prognosis, and quality of life

JAMA 2004

- The severity of comorbidity strongly influences survival
- At any point in time patients with more severe other ailments had worse survival
- And makes treatment of the cancer more difficult

- 69% of cancer patients have 1 chronic disease
- 33% of cancer patients have 2 or more chronic diseases
- 76% of African American women
- 70% of African American men
- 67% of Caucasian women and men

RISK

- The risk of comorbid disease is increased with
- --smoking
- --unhealthy diet
- --lack of physical activity
- --alcohol abuse

How other diseases impact on cancer

- On treatment choices for cancer
- Directly on risk of cancer, cancer behavior, survival, cancer progression

RISK

- AGE
- Is the single most important risk factor for developing cancer
- Risk of cancer per year:
 - Age 20----1/100,000
 - Age 50----1/1,000
 - Age 80----1/100

- AGE
- Older patients (>70) have an average of 3 other diseases in addition to their cancer
- Older cancer patients already take an average of 6 prescription drugs

Comorbidity and the risk of cancer

- DIABETES
- Increases the risk of getting colon cancer, breast cancer, pancreatic cancer, liver cancer, bladder cancer, lymphoma

- OBESITY
- Increases overall death rate due to cancer
- Increases risk of breast cancer, prostate cancer, colon cancer

- OBESITY
- Increases blood leptin levels, which is a growth factor for cancer and decreases cancer survival
- Good news: loosing weight decreases risk back to normal

- HIGH CHOLESTEROL/ TRIGLYCERIDES
- Increases risk of colon cancer
- Statin drugs may decrease cancer risk and make some chemo drugs more effective (5FU)

- INFLAMMATORY/ AUTOIMMUNE DISEASE
- Rheumatoid arthritis (but not osteoarthritis) increases the risk of getting lymphoma, lung cancer, prostate cancer
- Increases the risk of dying from lung cancer
- DECREASES the risk of getting GI cancer

- INFLAMMATORY DISEASES
- Are treated with NSAIDS, aspirin, Celebrex
- NSAIDS DECREASES
- The risk of colon cancer by 50%
- The risk of breast cancer by 18-28%
- Also decreases the risk of esophagus, stomach, ovarian, prostate, lung cancer
- Ibuprofen better than aspirin. NOT Tylenol

- INFLAMMATORY DISEASES
- Treatments can also increase the risk of cancer
- Cyclophosphamide, Methotrexate increase the risk of lymphoma/ leukemia
- TNF-alpha inhibitors like Remicaide can increase the risk of lymphoma

- HYPOTHYROIDISM
- Seen in 1/3 of older patients
- DECREASES the risk of breast cancer

- ALLERGIES
- Decrease the risk of brain cancer

Comorbidities affect survival and prognosis of cancer

- DIABETES
- Causes shorter cancer free survival
- Higher mortality from liver cancer surgery
- Worse prognosis in prostate and breast cancer

- RHEUMATOID ARTHRITIS

- Cancer patients may have a BETTER prognosis

COMORBIDITIES COMPLICATE CANCER TREATMENTS

- The more other diseases the less aggressive the possible cancer treatments

- Diabetes and low blood counts
- Cardiac and pulmonary disease and complications from anesthesia and surgery

Chemo drug modifications are often necessary

- Adriamycin can worsen heart disease
- Bleomycin and lung problems
- Cyclophosphamide and bladder toxicity
- Cisplatin/ carboplatin and kidney problem
- Avastin and high blood pressure/ stroke
- 5FU and chest pain
- Aromatase Inhibitor and osteoporosis

Chemo

- Many chemo drugs cause neuropathy
- Most drug doses have to be decreased in kidney or liver disease
- Cancer treatments cause fatigue

- OBESITY
- Increases overall cancer mortality
- Ex ovarian cancer time of survival is HALF than normal weight patients
- Also worse prognosis in breast and prostate cancer

WEDNESDAY, April 11 (HealthDay News) -- The spouses of cancer patients are at increased risk of heart disease and stroke, a new study suggests.

Researchers said the explanation might be that stress takes a toll on the health of caregivers. Using the national Swedish cancer registry and the Swedish inpatient registry, researchers found that risk for heart disease and stroke increased by 13 to 29 percent in people whose partner had cancer.

"Our study shows that preventive efforts aimed at reducing psychological stress and negative risk factors are important for people whose life partner has got cancer," Jianguang Ji, a researcher from the Centre for Primary Healthcare Research in Malmo, Sweden, said in a university news release. "Previous studies have shown that preventive work can considerably reduce stress and anxiety in close relatives of patients."

- The study authors considered another explanation for the higher heart risks -- spouses may share lifestyle risk factors, such as tobacco and alcohol use as well as poor diet and lack of exercise. But the researchers found that spouses' added risk for heart disease was only slightly increased by about 3 to 5 percent right before their partner became sick.

The study is published in the March 13 issue of *Circulation*.

While the study uncovered an association between caring for a spouse with cancer and heart risks, it did not prove a cause-and-effect relationship.