



## Breast Cancer

### Breast Cancer Screening:

It is testing for early breast cancer using mammogram. In addition to regular exam it helps lower chance of getting cancer.

It is recommended for women 50-70 of ages. Those who are at high risk screening starts at 40 who are carrying genes or have a close relative with breast cancer at a young age. Earlier diagnosis means easier to heal and better outcome.

Drawbacks include exposure to x-ray.

Abnormal mammograms prove to be negative in 9 out of 10 times i.e. cancer may be present in 1 out of 10 abnormal mammograms. Any abnormal mammogram needs to be repeated in 6 months.

Further tests include biopsy.

MRI gives more false positive results than mammograms. They are used along with mammograms in high risk patients. Mammograms need to be done every 1-2 years depending on risk.

### Breast Cancer

It is usually discovered as a painless mass in breasts. It sometimes run in families.

Early discovery is by using mammograms and further testing might be needed in form of a biopsy.

**Treatment** depends on the stage the cancer is in.

- **Mastectomy:** Removal of whole breast. Reconstruction may be followed.
- **Breast Conserving Therapy:** Cancer removal along with healthy surrounding tissue. Radiation is needed along with it.
- **Radiation.**
- **Chemotherapy:** Some are used to shrink tumor to be easily removed by surgery. Some are taken after surgery to keep cancer from coming back.
- **Hormone therapy:** some cancers grow in response to hormones, so blocking these hormones might be given.
- **Targeted Therapy:** Certain special cancers can be dealt with using this kind of treatment.

### After Treatment:

You need to be checked frequently to make sure any recurrences if happened are dealt with.

### Risk Factors:

The average risk of having breast cancer is 10-15% in women's lifetime.

Many risk factors are non-modifiable, but it hints for more screening and testing.

For inherited type of cancer when one of genes are passed to offspring the chance is more than 50% to develop breast cancer.

### Standard Risk Factors:

- Increased Age: >35.
- Gender: Women are 100 times more to develop cancer than men.
- Ethnicity: More in blacks, less in white.
- Weight: Increased weight increases chance of having breast cancer.
- Tall stature: Increased risk.
- Benign Breast diseases: Increased risk.
- High bone density.

### Hormonal Factors:

- Increased androgens.
- High insulin.
- Menopausal hormone therapy.

### Reproductive Factors:

- Age at time of menses starts and at menopause. Younger age of menarche and older menopause increases risk.
- Pregnancy and breastfeeding: Women who never give birth are at increased risk. The younger pregnant age is protective.
- Abortion is not associated with breast cancer.

### Personal History of Breast Cancer or DCIS

**Family History:** Inherited genes increases risk 50-80 %.

### Lifestyle Factors:

- Physical Inactivity
- Alcohol
- Smoking

### Dietary Factors:

- Less fruit and vegetable
- High fat intake
- High red meat
- Low calcium and Vitamin D diet.

### Environmental Factors:

- Ionizing radiation at younger age.
- Night shift work.

### Reducing Risk:

Lifestyle changes:

- Plan 1st birth before age 30.
- Breastfeeding for at least 6 months.
- Avoid or limit postmenopausal hormonal therapy.
- Avoid radiation exposure.
- Avoid or cessate smoking and alcohol.
- Maintain a healthy weight.
- Limit night shifts.
- Exercise.

