

Breast Cancer 101

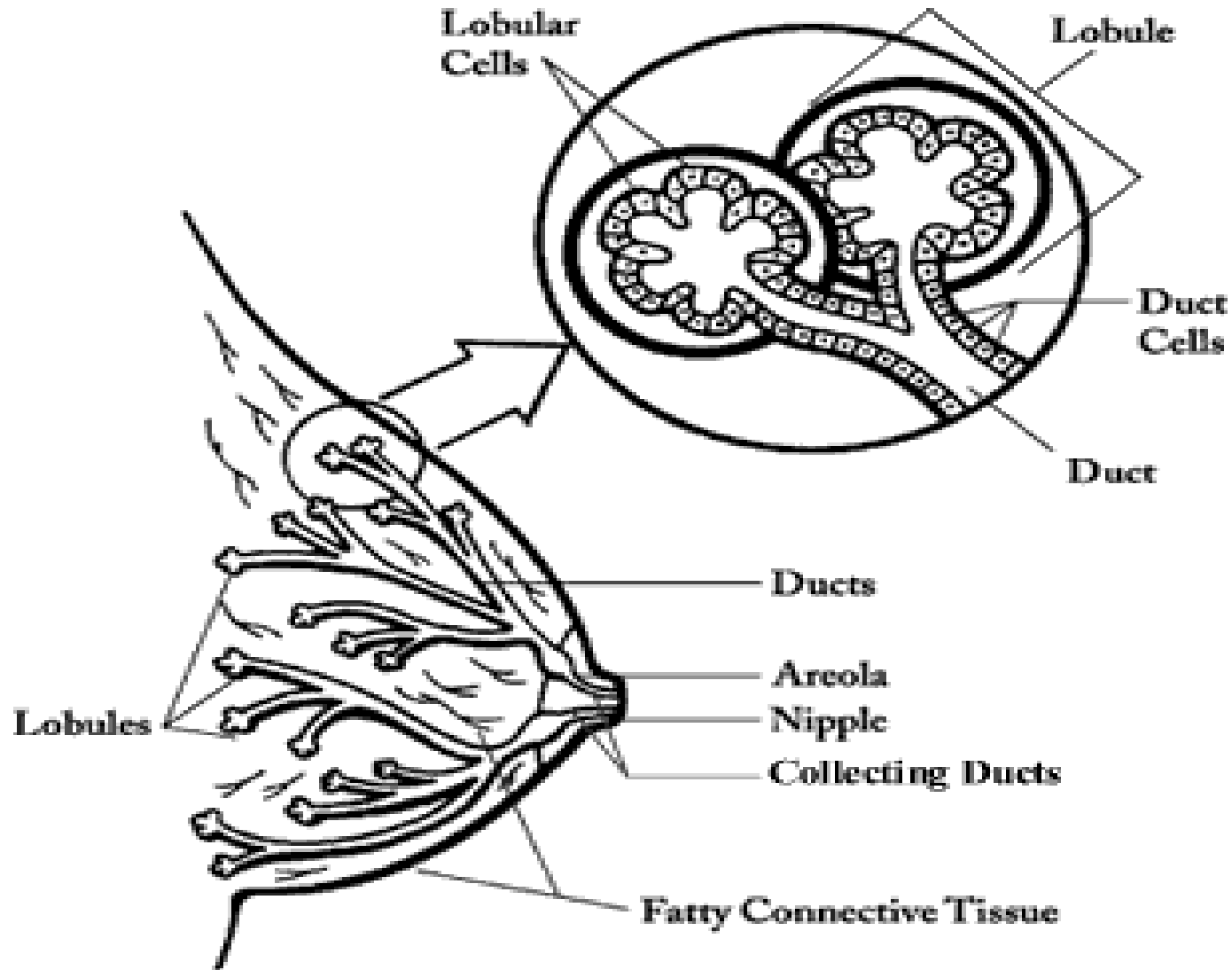
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Objectives

- Be more motivated to develop and maintain a healthy lifestyle.
- Encourage annual mammogram in women 40 and over
- Understand better the terms related to this treatable disease.

Anatomy of the normal breast



Types of Breast Cancer

- Ductal carcinoma – lining cells
- Lobular carcinoma – lining cells
- Adenocarcinoma – glandular cells
- Carcinoma in situ – early stage
- Invasive carcinoma
- Sarcoma
- Inflammatory

Breast Cancer Statistics

- Most common cancer among females in the US
- Second leading cancer related cause of death in women after lung cancer
- 200,000 females diagnosed with invasive breast cancer in 2008

Breast Cancer Statistics

- 40,000 women will die in 2008 of breast cancer
- 48,800 women died in 2000 of breast cancer
- There are 2.5 million living breast cancer survivors
- Early detection and better treatment is curing disease and prolonging life

Breast Cancer Statistics

- 1 in 8 women have a chance of developing invasive breast cancer.

What causes breast cancer?

It's the genes!

- inherited genes: from parents
- mutated genes:
 - environmental/unknown?
 - at the level of a single cell

What increases risk?

- Females are 100 times more likely to develop breast cancer than males
- 2 out of 3 women with breast cancer are over 55 years of age
- 5-10% inherit BRCA1 and BRCA2 gene, increasing their chance of developing breast cancer 80% (also increases ovarian cancer risk)

Risk of developing breast cancer

- Family history of mother, sister or daughter
- Most women with breast cancer have no family history
- White women slight increase risk
- Afro-American women are more likely to die and have faster growing cancers
- Asian, Hispanic and American Indian women have lower risk

Factors associated with increased risk of developing breast cancer

- A history of breast cancer in one breast increases risk of developing cancer later in the same breast and in the other breast
- Breasts that are dense have increased risk
- A history of radiation therapy to the chest increases the risk

The effect of hormones on breast cancer risk

- Increased risk for women who began menses <12 year old
- Increased risk for women who had menopause after age 55
- Increased risk is seen with history of DES treatment of pregnant women to prevent miscarriage in the mother and female child

Hormone effect on risk

- Birth control pills have shown a slight increase in risk
- Hormone replacement therapy used for treatment of menopause and osteoporosis
 - estrogen only has a minimal effect up to 10 years
 - progesterone + estrogen = increased effect

Effect of Lifestyle on breast cancer risk

- Overweight and obese patients have an increased risk
- Sustained breast feeding decreases risk
- One drink of alcohol has no effect but two to five drinks per day increases risk 1 ½ times
- A diet low in fat decreases risk
- Exercising 45-60 minutes for five days a week decreases risk

Early detection is key to the cure

- Get a clinical breast exam yearly after age 18
- Get a mammogram yearly after age 40 or sooner depending on family history
- An MRI is used for high risk women along with mammography
- Contact the National Breast and Cervical Cancer Early Detection Program for free care in uninsured patients

www.cancer.org 1-800-227-2345

MRI plus mammography is offered to all high risk patients

- The use of MRI is still being studied
- High risk cases are those with
 - BRCA1 and BRCA2 begin at age 30
 - A first degree relative with breast cancer
 - Personal history of breast
 - Life time risk of 20-25%
 - Risk 15-29%; low risk <15%
 - Radiation to the chest between ages 10-30

Determine life time risk

- Google M.H. Gail Statistical Risk and complete the survey
- Questions include: history of breast Ca, age, age at first period, age at first live birth, first degree relatives with breast cancer, breast biopsy, # of breast biopsies, present of atypical hyperplasia on biopsy, race

Most Common New Symptoms

- Any lump or mass
- Usually painless/ maybe tender
- Usually Hard/ maybe soft
- Usually has uneven surface/may be round
- Swelling
- Skin changes: irritation, dimpling, scaliness

Symptoms which should be evaluated

- Nipple discharge
- Inverted nipple
- Bloody nipple discharge
- Underarm lump

All new findings need to be fully evaluated when found

- What to expect
- Clinical breast exam
- Mammography
- Ultrasound
- MRI

A biopsy?

- A biopsy is necessary for diagnosis
- Biopsy can be done with a fine needle, or core needle, or as a lumpectomy to make a diagnosis

For Cancer Diagnosis

- Lymph node evaluation for possible spread is necessary for treatment decisions in new diagnosis
- Other test to determine possible spread beyond breast and lymph nodes may be necessary

Staging

- Initial biopsy is graded 1-3, tells aggressiveness
- Hormone receptor status
 - estrogen or progesterone
- TNM staging
- Tumor size
- Lymph node involvement
- Presence of metastatic disease

Treatment Options

- Surgery
- Radiation
- Chemotherapy
 - Short term
 - Long term
- All of the above
- Clinical trials

Take Home Message

- Over 39? Yes, get your yearly mammogram
- Family history of breast cancer in mother, sister or grandmother? Discuss risk and evaluations with MD; genetic testing?, early mammogram?
- Are self breast exams necessary? Yes, a back up for mammograms
- How important is healthy living to prevention and treatment? VERY
- All breast lumps need evaluation but 90% of them are benign

What do you know about your breast?

- Each month for a few days the breast are more tender and have more cysts, this is not the time to do a self breast exam or a mammogram
- Breast feeding may be protective
- Healthy living prevents breast cancer.
- #1 killer of young women is AIDS
- #1 killer of women less than 40 years old is heart disease
- #1 killer of women over 40 year old is breast cancer

Thank you!

