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REFERENCE # 4 on BRAIN –HEART HOME-STUDY WEBSITE POWERPOINT PRE: 8/2022

MAYO CLINIC

Healthy Lifestyle

STRESS IS LINKED TO HEART DISEASE.

Stress Management

Triggers for Stress might be labeled by some as “no big thing”, but for you “you may feel you are constantly under attack.” These are very big things for you, and you must “fight back, and not allow stress to control your life”. We will present one of many ways today and present others as Yoga, Meditation, and many, many other ways to help lighten that load on your Brain and Heart and hopefully, with education and professional guidance, lessen your chance of heart disease and cancer.

Get ready to join us at upcoming and PLEA of GRNY events.

Many demands you may face every day from taking care of your family, HEAVY Workload, TROUBLE WITH COLLEAGUES AT WORK, paying your bills, GOING TO SCHOOL, having problems passing your examinations, etc., all qualify as a stress.

Did you know that your body treats all these circumstances as “THREATS”? Your body responds the way it is wired to do when there is a perceived threat to your safety, and a FIGHT or FLIGHT response is activated attempting to keep you safe.

This continued exposure of your body (Brain and Heart) to any of these circumstances with unrelenting high levels of the stress hormones like Cortisol, Adrenaline is detrimental to your Heart and Immune System, just to mention two of the systems.

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PLEA of GRNY 4th Annual City-Wide Inner City

Breast Cancer and Health Seminar

ZOOM

6/11/2022: 7:00 am -12:30 pm

Breast Cancer in Men and Women

**PRESENTED WITH EMPHASIS ON A LAYPERSONS PERSPECTIVE**

WHAT ARE THE DIFFERENCES?

WHAT IS THE EXPLANATION FOR THE DIFFERENCES?

WHICH SEX (XY vs XX) is breast cancer MORE COMMON IN?

**Answer:**

Women 100:1 (XX vs. XY)

WHAT CELL TYPE IS MORE COMMON?

**Answer:**

There are **4 Tissues** in this Miracle we call the BODY that makeup everything, in different combinations.

**Epithelial (“epi –theel –ee-yal”)** - the inner lining of organs where most common cancers develop). **Connective tissue, Nervous tissue, and muscle tissue.**

**Breast cancer is a cancer of the lining – the epithelium (“epi –theel –e-yum”).**

80 % - 85% Invasive Ductal carcinoma in Men

Women 60% average (> 40%-75% in Rosen’s Textbook of Pathology.)

WHERE IS THE MOST COMMON SITE IN WOMEN? IN MEN?

**Answer:**

For men: (In the back of nipple - retro areolar MEN in that structure shaped like a tube ) Very few lobules so, less common invasive lobular.

For women: Upper outer BREAST women. Termed upper outer quadrant. Ladies, we get a lot of different cell types, 12 or so. The most common cell types are those that develop in the milk ducts (TDLU) and milk sac. The same structure where milk is made to feed the young.

WHAT IS A QUADRANT?

**Answer:**

Make a crosshair on your breast with your finger, with the nipple as the center point of “crosshairs”. Make a cross on the breast from top to bottom and side to side. That divides your breast (men or women) into 4 quadrants. We use this division to Stage Breast Cancer and assist your Surgeon in deciding what type of surgical procedure is needed when cancer is diagnosed.

WHAT EXPLAINS this location of cancer in men and women?

Breast cancer in men and women, continued…

NOW WE GET DOWN TO “BRASS TACKS”.

ONE WORD EMBRYOLOGY:

STUDY OF THE FORMATION OF EMBRYO- FETUS

INTERESTING QUESTIONS AND ANSWERS

**What is an Embryo**? From the Medieval Latin = Embryo / Embryon - GREEK Embryon “ A young one, Homer, a young animal. Sometime later “fruit of the womb” and Finally: “THAT WHICH GROWS”.

When we discuss the embryo, we are referring to the “fruit of the womb” and “that which grows” through a process of fertilization from sexual reproduction, in an organism.

OK, then, there is another question:

What is an organism (pronounced “organ-izm”)?

It is “an individual animal, or plant or single-celled life form.”

In general, animals that reproduce sexually FOR PURPOSES OF THIS DISCUSSION.

The root word is Embryo; means “that which grows.”

WHY?? Because Plants are ALIVE & also have embryos in the seeds.

Remember:

* Plants and Animals are both alive.
* Without Plants, there is no LIFE.
* FRUITS AND VEGETABLES ARE REQUIRED FOR LIFE, AND BY DEFAULT A HEALTHY BODY.
* EAT FOODS FROM THE GROUND, THE COLORS OF THE RAINBOW.

Remember the “name” ROY G. BIV

RED, ORANGE, YELLOW, GREEN, INDIGO, and VIOLET

Breast Cancer in Men and women, continued…

There you have it…

NOW, LET’S MOVE ON TO BREAST DEVELOPMENT AND ANATOMY

Visualize or look at an IMAGE OF THIS TREE with Trunk branches we call limbs (incidentally the same word we use to describe the arms sticking out from our bodies), next branch from the main duct we call lobules, at the tip of the tree (periphery) is the beautiful blooms we call flowers and finally, in the breast, we call these milk sacs – lobules, alveoli (main duct, lobes, lobules milk sacs we call alveoli). The last branch of the duct enters this “beautiful flower” – the milk sac.)

THIS TREE IMAGE in nature is the same as your milk ducts.

Questions:

What is the difference in structure?

Answer: None

What is the difference in location?

Answer: Breast. One is sitting on the ventral portion (“belly side of body”), of your chest on top of a muscle surrounded by fat and enclosed in connective tissue, which we call fascia.

Tree in your yard:

The tree is in your yard, or along the road, in the *GROUND.* Depending on your religion and your beliefs One Belief, The Bible, says that is where we came from. Body first and Spirit second with “Breath of Life.” There are lots of Similarities. Each person can draw their conclusions. Just Pointing out Observations of Similarities

BREAST:

MILK DUCT > BREAST LOBES > BREAST LOBULES > TDLU

MILK SACS ALSO CALLED ALVEOLI (pronounced, “AL-VEE-O-LIE “)

Last BRANCH ENTERS THE MILK SAC. AT THIS ENTRANCE THIS ENTRY POINT IS CALLED

THE TDLU. TERMINAL (“meaning “THE END OF”) DUCT LOBULAR UNIT IS WHERE MOST cancers OCCUR IN WOMEN WILL DEVELOP.

MEN:

YOU have very few of these STRUCTURES. YOUR CANCERS DEVELOP WHERE YOU HAVE DUCTS. UNDERNEATH THE NIPPLE.

THE EMBRYOLOGY BELOW FURTHER EXPLAINS

DEVELOPMENT

FACTS:

Human development occurs in 3 phases we call 3 Trimesters.

1st 3 month= first trimester = 12 weeks

2nd 3 months = 2nd Trimester 24 weeks

3rd and last 3 months = 3rd trimester =36 WEEKS.

Breast cancer in men and women continued.

MEN WOMEN

**First trimester**

SAME SAME

In the 5th WEEK of EGG MEETING SPERM, ALSO CALLED 5TH WEEK GESTATION (“JESS –TATION” in MEDICAL TERMS). OUR MILK STREAK DEVELOPS.

THAT IS JUST MORE THAN 1 MONTH (4 weeks).

Breasts form from the same layer that sweat glands develop from, and

Is sometimes called a modified sweat gland.

THIS TOP LAYER, ALONG OUR CHEST, DIGS/BURROWS INTO THE CHEST WALL, BRANCHES, AND BUDS, FORMING DUCTS. ALL OF THE REST OF THAT BAND DIES OUT OR “REGRESSES”. Sometimes, this is incomplete and extra nipples can be found along that “milk line” which is also called a “galactic band”. Remember, if there happens to be breast tissue, cancers can occur here as well.

**2nd Trimester**: not too much with BREAST is occurring, BUT look what happens during the next phase…

**3rd Trimester**: Pregnancy Placental (connection between mother and fetus responsible for feeding the unborn) hormones ESTROGEN AND PROGESTERONE (“ES-TRO-JEN” and “PRO-JESS-TUH-RONE”) enter the fetal (the BABY’S) blood flow SYSTEM and opens the ducts into structures that look like tubes, so milk can flow (also called “recanalization”) and by 32-40weeks, milk sacs (terminal duct lobular units) develop. THIS IS THE SITE OF CANCERS.

IMPORTANT POINT:

XY (MEN) / VERY FEW MILK SACS AND BY DEFAULT, VERY FEW TDLUs XX OR ANY HUMAN SPECIES WITH DOUBLE X (XX Y KLEINFEKYERS SYNDROMES OR FEMALE XX HAVE HIGHER CHANCES OF DEVELOPING BREAST CANCER.

**BREAST CANCER IS AN XX DISEASE**

NOW GO BACK TO THE TOP OF THIS DOCUMENT AND ANSWER WHY WOMEN GET CANCER MORE THAT MEN, WHY MEN Get BREAST CANCER most often UNDER THE NIPPLE AND WOMEN GET cancers anyplace in the breast but MOST commonly IN UPPER OUTER QUADRANT (but that’s another story).

ANSWER IS IN EMBRYOLOGY, AND NOW, YOU AS A LAYPERSON KNOWS MUCH ABOUT YOUR BODY AND just ONE organ the BREASTS as ONE (1) of 79 ORGANS IN THIS MIRACLE OF A CREATION AND THIS SITE OF MOST COMMON CANCER IN WOMEN, THAT TAKES THE LIFE OF SO MANY OF US WITH LOSS OF LIFE IN AFRICAN- AMERICANS AT 2X THE RATE.

REMEMBER, KNOWLEDGE IS POWER. NO ONE CAN BE HELD ACCOUNTABLE FOR MAKING A MISTAKE IF YOU DO NOT KNOW ANY BETTER. HOWEVER, IF YOU KNOW BETTER, YOU ARE EXPECTED TO DO BETTER. FOR EXAMPLE, NORMAL WEIGHT, NUTRITION, EXERCISE, AND “THAT POSITIVE MINDSET” AS ONLY YOU CONTROL. THIS IS NEEDED TO CUT YOUR ODDS OF GETTING BREAST CANCER AND “one of our newest partners for discussion” HEART DISEASE.

SEE YOU IN AUGUST 2022, FOR A REVIEW AND TEST OF YOUR UNDERSTANDING OF THE KNOWLEDGE PRESENTED, GOD WILLING…

PLEA OF GRNY 6/11/2022  
SEMINAR TO BE CONTINUED 8/2022.

Reference available upon request.

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4TH ANNUAL PLEA OF GRNY MULTIDISCIPLINARY BREAST AND HEALTH SEMINAR

IN THE INNER CITY

6/11/2022

BREAST CANCER AND OBESITY RELATIONSHIP / BMI >30

QUICK REVIEW: DISCUSSED IN THE PAST

DISCUSSION OF CAP (CENTRAL ADIPOSE TISSUE), CYTOKINES, AND INFLAMMATION WILL BE PRESENTED NEXT SESSION. FOR NOW, JUST KNOW THESE FACTS AND WORK WITH YOUR DOCTOR TO GET YOUR BMI (weight) TO A GOOD RANGE.

REFERENCE:

BROWN, Kristy, Simpson, Evan R

All references are available and will be placed on the website after the SEMINAR.

“Obesity is associated with an increased risk of breast cancer and is also positively associated with tumor size and a higher probability of having positive axillary (armpit) lymph nodes and fastest-growing tumors”.

A lesson can be learned from this one statement. Please work with your doctor.

PREVENTION is just as IMPORTANT as cure ONCE YOU GET IT.

PLEA OF GRNY   
HOPE YOU AGREE.

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PLEA of GRNY 4th Annual Multidisciplinary Inner City Breast Cancer and Health Seminar

6/11/2022

CANCER CELLS AND SUGAR

Quilling. Patrick, Beating Cancer with Nutrition, Nutrition Times Press, Inc. 2005

Chapter 11

“Cancer cells feed almost exclusively on sugar. Cancer cells demonstrate a 3-5-fold increase in glucose uptake compared to healthy cells. “

What are some ways to slow tumor growth?

1. Nutrition –Talk to your Doctor about diets that lower blood sugar.
2. Exercise
3. If you are diabetic, your doctor will know how to help you control your diabetes and keep that level down with medications.

There is an Imaging study called a PET CT scan. This imaging study takes advantage of this behavior of tumors to diagnose tumor spread to parts of the body distant from the original

site. This is called metastatic disease.

To perform a PET CT scan, glucose labeled with a radioisotope is injected into a vein, and imaging is done. Because cancer cells feed on glucose. the injected material will selectively localize in cancers, and we are able to image and see tumor spread.

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