

# Breast Cancer Overview Part 2

Staging & Surgical Management

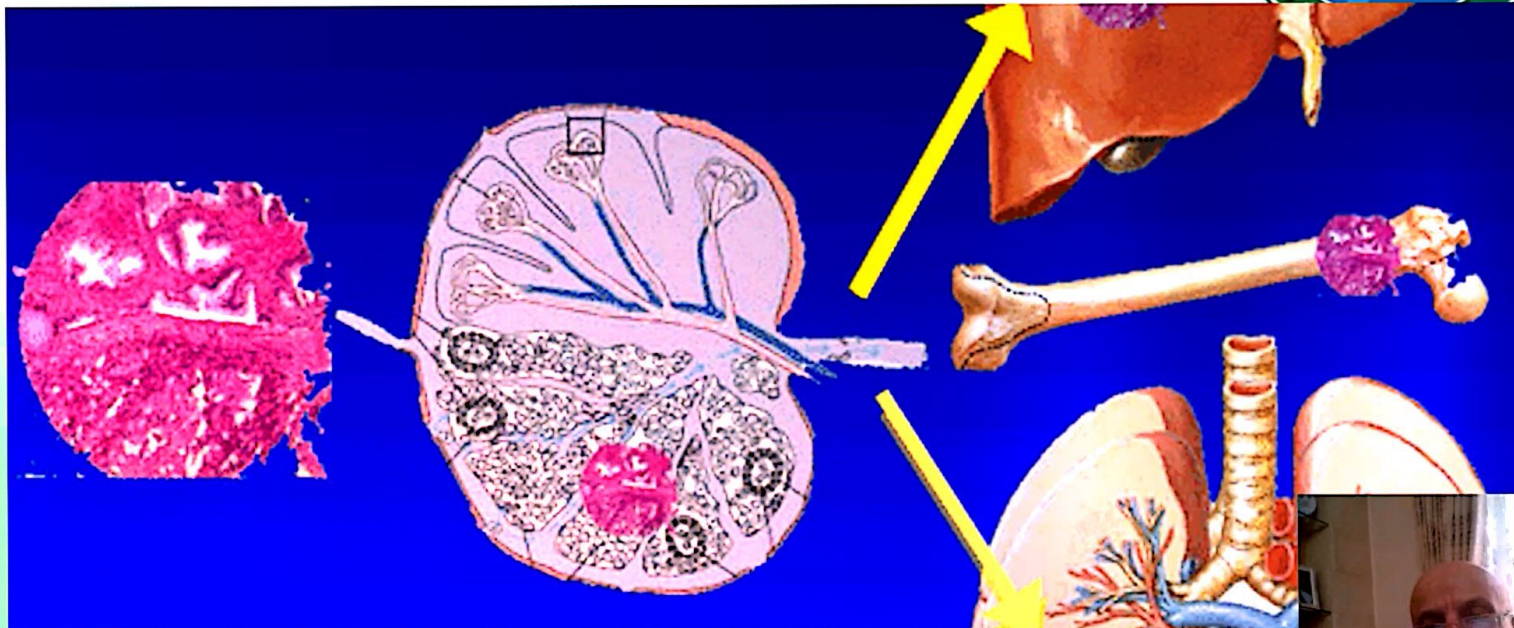


**Jamal Masad Melhem**

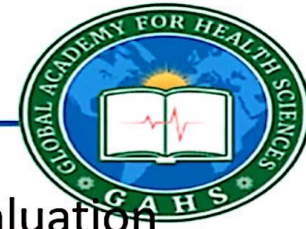
Professor Surgical oncology  
Jordan University  
Amman, Jordan



11/4/2020



May go to Brain → Don't DO CT, unless  
pt has symptoms



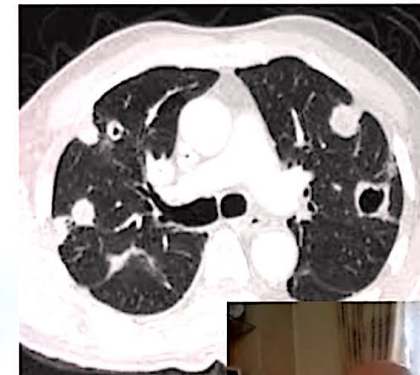
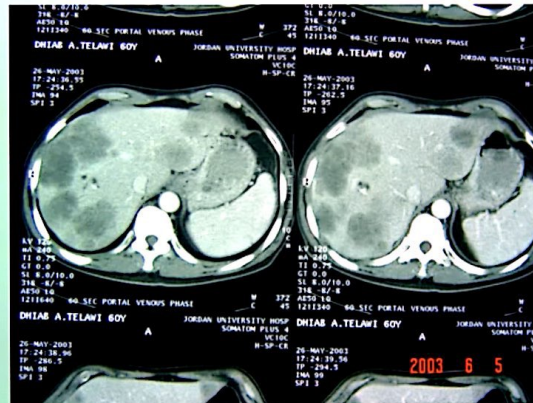
- 
- Staging should be done after doing the proper evaluation
  - Of the primary tumor in the breast and axilla by imaging and
  - Biopsy. (T&N)



Bone scan



CT For chest & Abdomen



\* These tests are -ve in an early stages



*Bone M<sup>D</sup> infiltration*  
↑

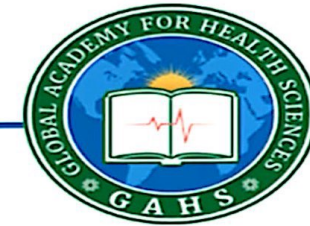
- CBC count with differential and platelet count
- Chemistry and renal function studies
- Liver function tests
- Tumor markers CA 15.3

*↳ pt may develop Anemia due to*

11/4/2020



# Objectives of staging



- Provides useful prognostic information.
- Allows decisions to be made regarding adjuvant therapy.
- Allows comparison of treatment outcomes between different centers.



# TNM Criteria



- **T = Primary Tumor** *by US*
  - Tis = carcinoma in situ
  - T1 = less than 2 cm in diameter
  - **T2 = between 2 and 5 cm in diameter**
  - T3 = more than 5 cm in diameter
  - T4 = any size, but extends to the skin or chest wall
- **N = Regional Lymph nodes** *By examination*
  - N0 = no regional node involvement
  - **N1 = metastasis to movable same side axillary nodes**
  - N2 = metastasis to fixed same side axillary nodes
  - N3 = metastasis to same side internal mammary nodes
- **M = Distant Metastasis**
  - **M0 = no distant metastasis**
  - M1 = distant metastasis

**T2N1M0**



# Clinical Staging



	T	N	M	5-Year Survival
Stage 0	Tis	N0	M0	> 95%
Stage I	T1	N0	M0	Overall = 85%
Stage II				Overall = 66%
(Stage IIA)	T0	N1	M0	
	T1	N1	M0	
	T2	N0	M0	
(Stage IIB)	T2	N1	M0	
	T3	N0	M0	
Stage III				Overall = 41%
(Stage IIIA)	T0	N2	M0	
	T1	N2	M0	
	T2	N2	M0	
	T3	N1, N2	M0	
(Stage IIIB)	T4	Any N	M0	
	Any T	N3	M0	
Stage IV	Any T	Any N	M1	Overall 10%

11/2/2020

15





65% 14:42

## Breast Cancer Staging Calculator

	Clinical			Pathological		
<b>T</b>	T0	Tis	T1	<b>T2</b>	T3	T4
<b>N</b>	N0	N1mi	N1	N2	<b>N3</b>	
<b>M</b>	<b>M0</b>			M1		
PROGNOSTIC FACTORS	<b>G1</b>		G2	G3		
	<b>HER2 +</b>		<b>ER +</b>	<b>PR +</b>		
	HER2 -		ER -	PR -		

**IIIC**

Anatomic Stage

**IIIA**

Clinical Prognostic Stage

-2

**TNM 8 CALCULATOR**





Stage 0



Stage I



Stage II

>2cm

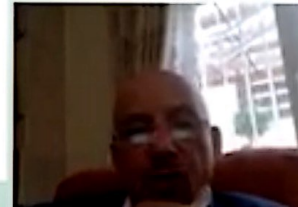


Stage III

>1W



Stage IV  
mets.



• Stages for predict the prognosis of the cancer



## 5-year relative survival rates for breast cancer by stage

- The 5-year relative survival rate for women with **stage I** breast cancer is close to **100%**.
- For women with **stage II** breast cancer, the 5-year relative survival rate is about **85%**.
- The 5-year relative survival rate for stage III breast cancers is about **70%**. But often, women with these breast cancers can be successfully treated.
- Breast cancers that have spread to other parts of the body are more difficult to treat and tend to have a poorer outlook. Metastatic, or **stage IV** breast cancers, have a 5-year relative survival rate of about **20%**. Still, there are often many treatment options available for women with this stage of breast cancer.

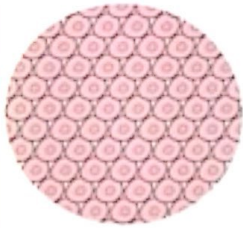
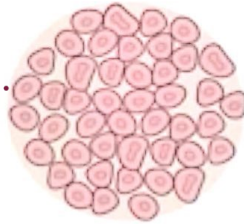
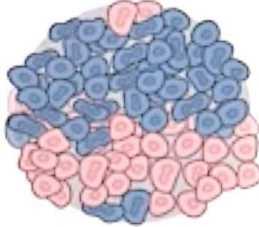
⇒ Do surgery then CK

⇒ chemotherapy



# Histological Grades



Prognosis				Grade
	<b>Grade 1</b>	<b>Grade 2</b>	<b>Grade 3</b>	
				
	<p><b>Glandular/Tubular Differentiation:</b>                      &gt;75% of tumor forms glands</p> <p><b>Nuclear Pleomorphism:</b>                      Uniform cells with small nuclei similar in size to normal breast epithelial cells</p> <p><b>Mitotic Count:</b>                      &lt; 7 mitoses per 10 high power fields</p>	<p><b>Glandular/Tubular Differentiation:</b>                      10% to 75% of tumor forms glands</p> <p><b>Nuclear Pleomorphism:</b>                      Cells larger than normal with open vesicular nuclei, visible nucleoli, and moderate variability in size and shape</p> <p><b>Mitotic Count:</b>                      8-15 mitoses per 10 high power fields</p>	<p><b>Glandular/Tubular Differentiation:</b>                      &lt;10% of tumor forms glands</p> <p><b>Nuclear Pleomorphism:</b>                      Cells with vesicular nuclei, prominent nucleoli, marked variation in size and shape</p> <p><b>Mitotic Count:</b>                      &gt; 16 mitoses per 10 high power fields</p> <p style="color: red;"><i>poorly diff.</i></p>	

Grade I tumors have a total score of 3-5

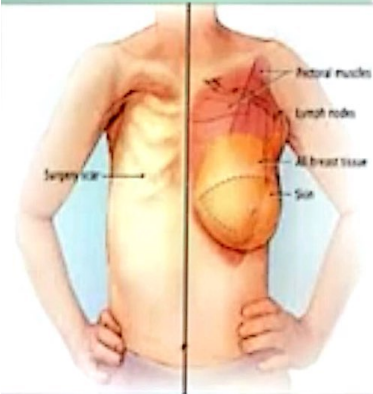
Grade II tumors have a total score of 6-7

Grade III tumors have a total score of 8-9



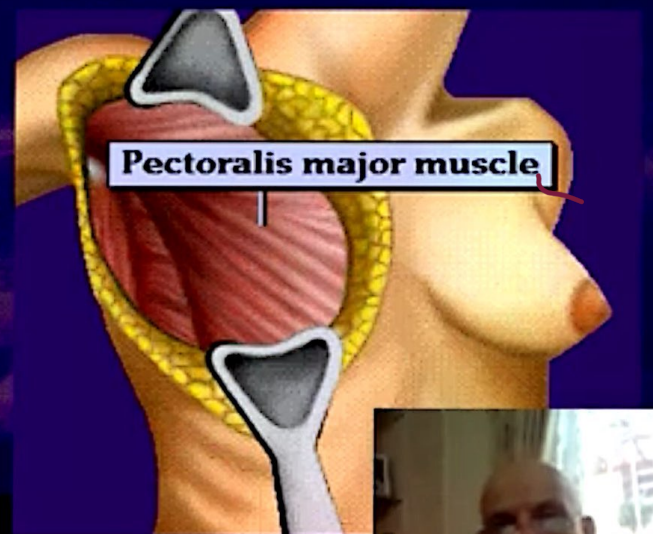
①

## Radical mastectomy

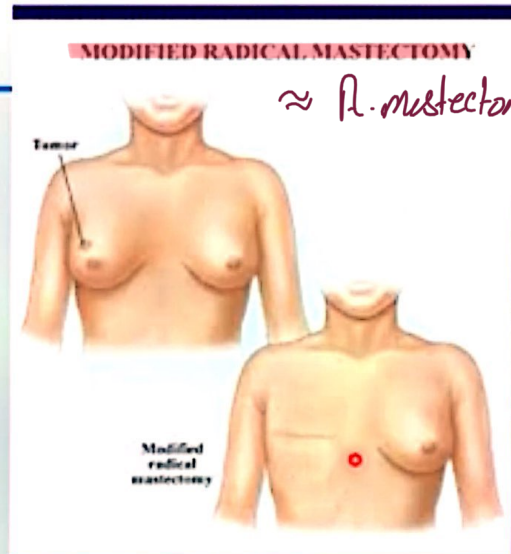


In radical mastectomy the muscles of the chest (e.g., **pectoralis major** and **pectoralis minor**) along with the breast and **lymph nodes** are all removed.

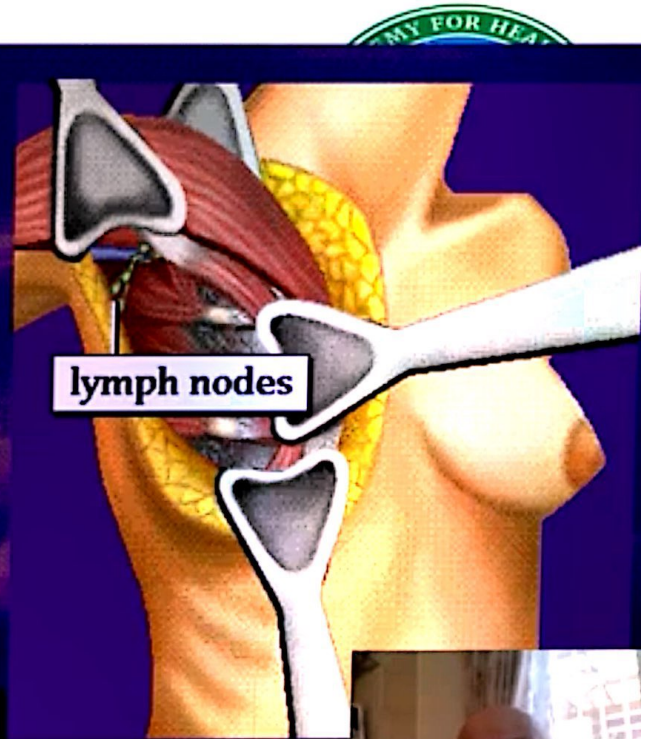
Radical mastectomy is now rarely performed. It is usually reserved for very large **cancers** that have grown into the **muscle**.

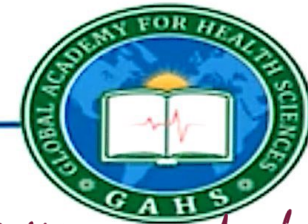


↳ loss shoulder stability

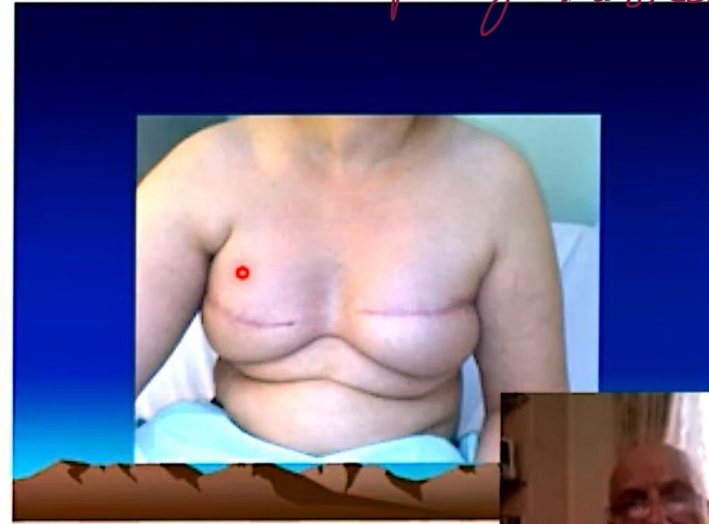
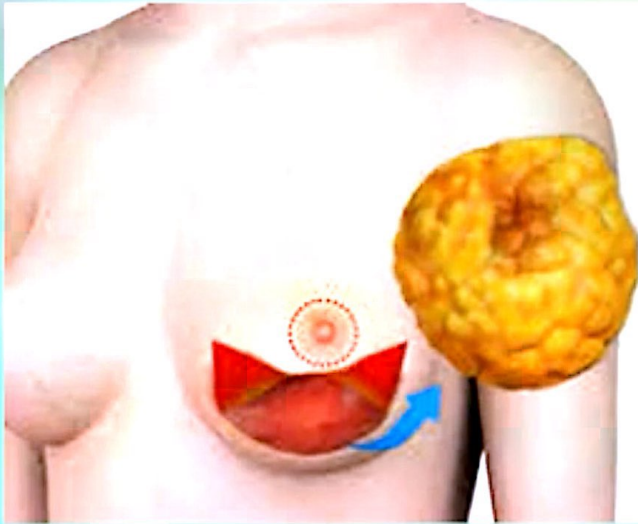


*≈ R. mastectomy*





Do skin sparing mastectomy



or replace it by silicone implant



### ③ Trans- Flap

- \* Transverse Rectus  
Abdominus  
myocutain \*
- less popular







From Back → less complication  
→ But we loss its function



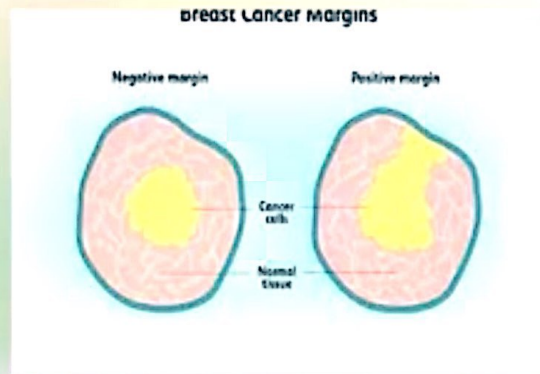
### Latssimus flap

Large Defects in Medium-Sized or Small Breasts

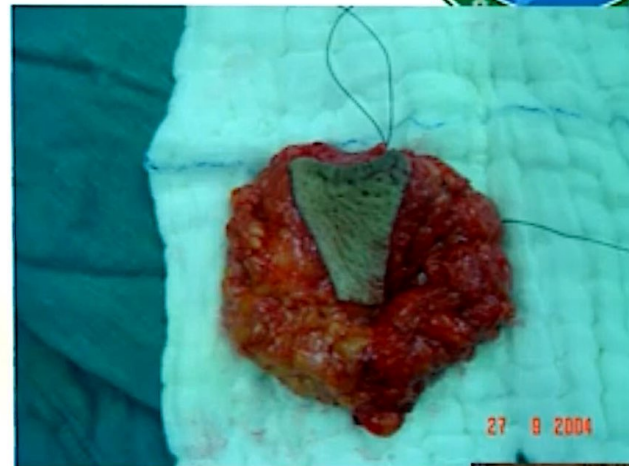
www.profjamaimehem.net



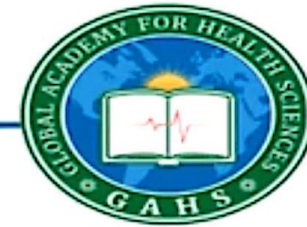
purely ms not fat  
ms will Atrophied ← with time



*wide local excision  
with safety margins*



## Types of Breast Conserving Operations

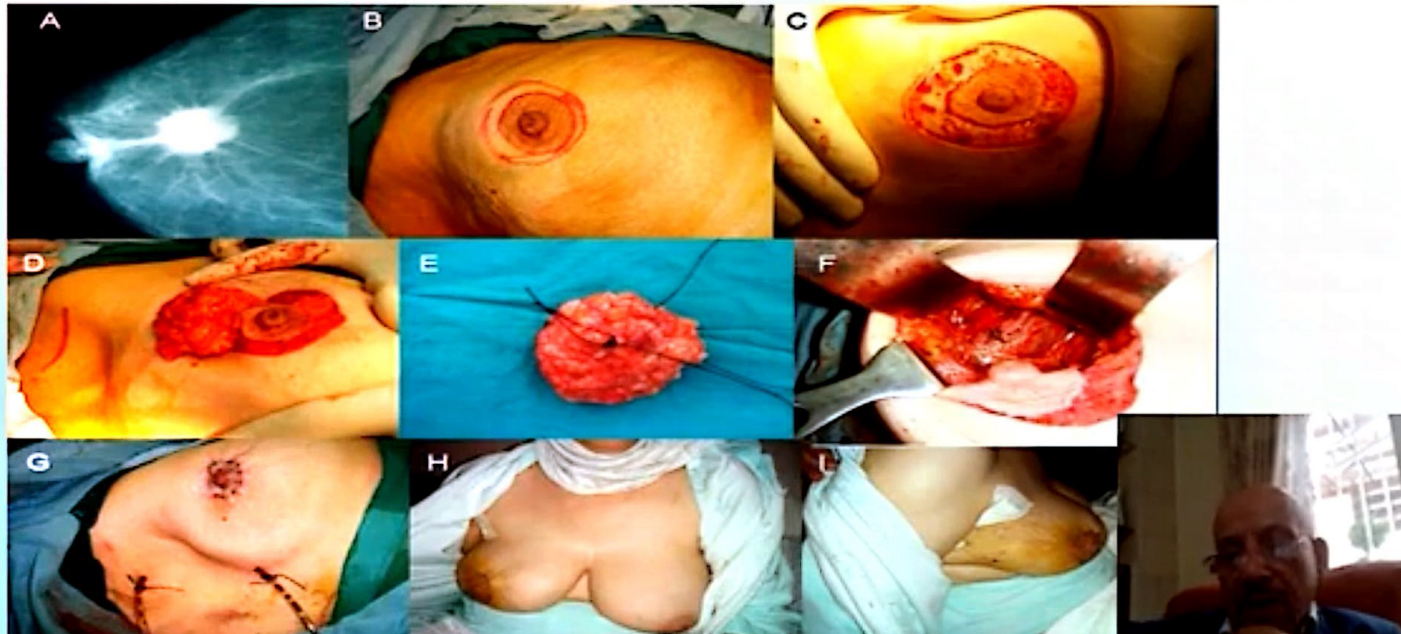


- Segmental mastectomy, quadrectomy,  
Partial mastectomy

*not standard / in the past*



oncologic surgery



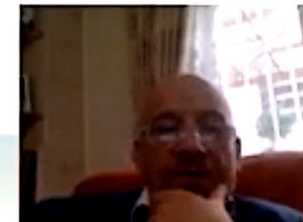
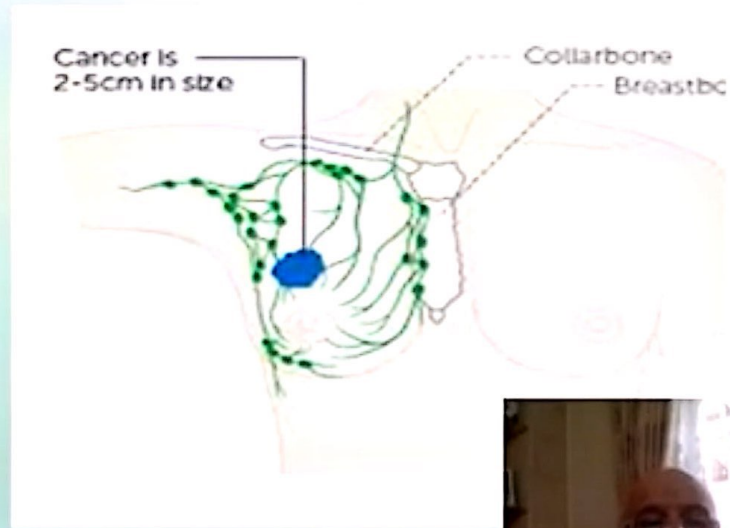
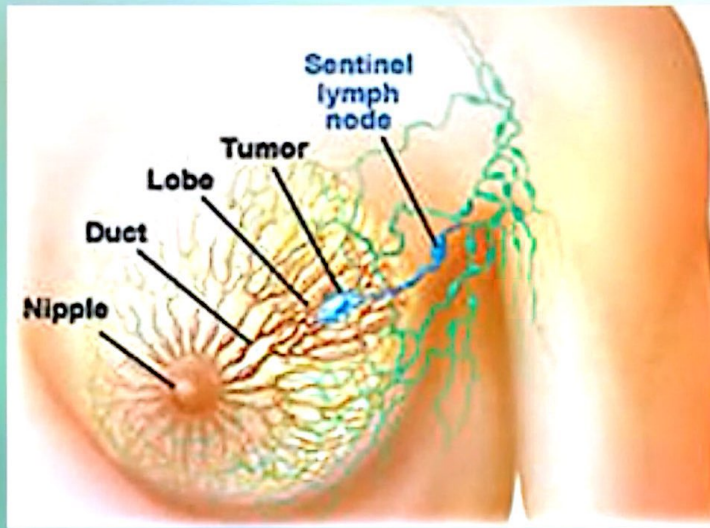
Donut Mastectomy - Infection

# Local Flaps



[www.profjamalmelhem.net](http://www.profjamalmelhem.net)





- Do level 2 or 3
- use  $\rightarrow$  First LN  $\rightarrow$  Ax. dissection or ref



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# Thank You

