

جَائِزَةُ الْحُسَيْنِ
بْنِ عَبْدِ اللَّهِ الثَّانِي
لِلْعَمَلِ التَّطَوُّعِيِّ

AL HUSSEIN BIN ABDULLAH II
AWARD FOR VOLUNTARY WORK



النادي الطبي
Medical Club



Radiology

Subject: Mammography Cases

Group no: D11

Done by: Hala Yaseen

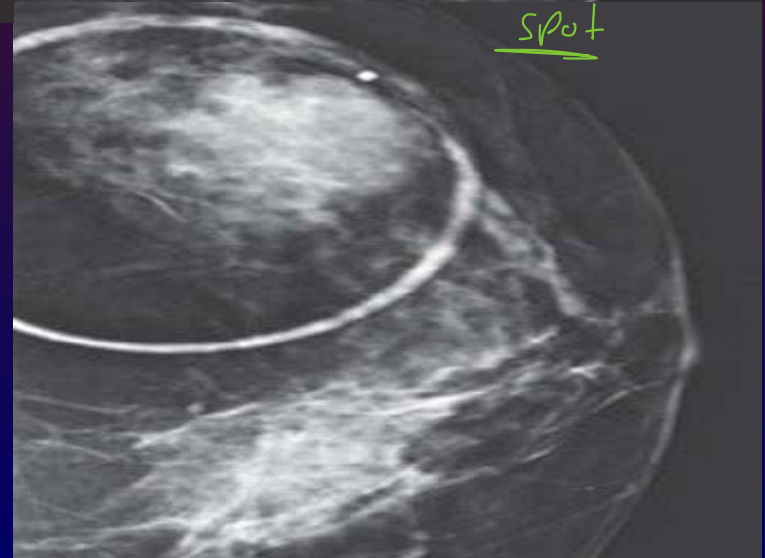
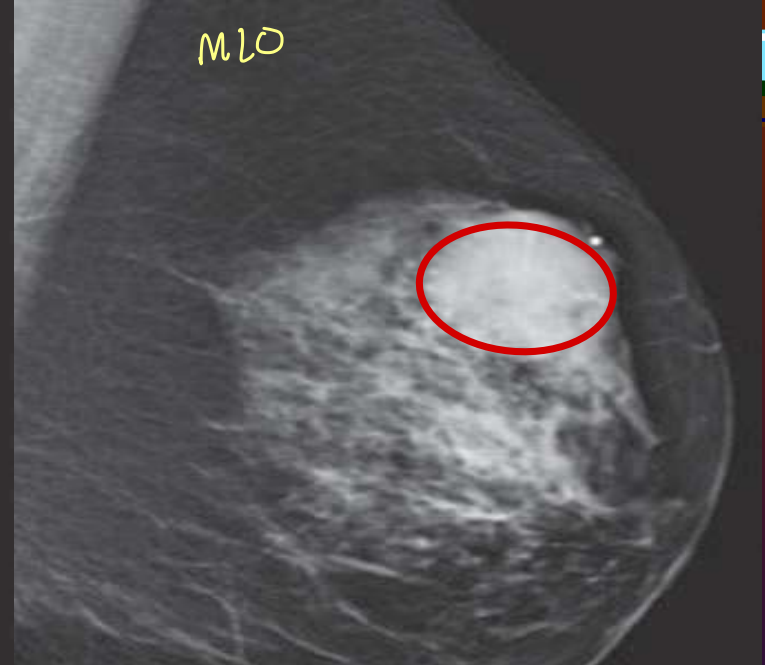
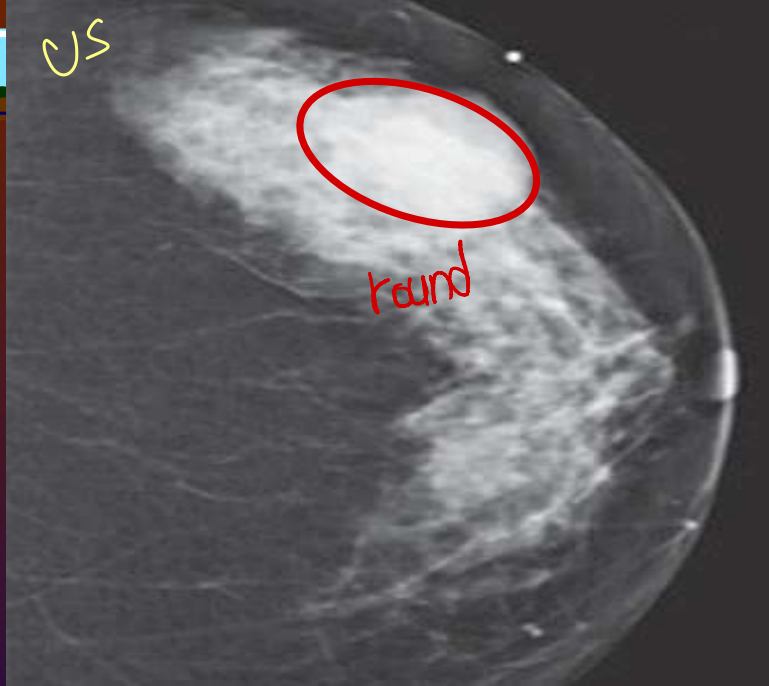


هَذَا خُلِقَ اللَّهُ فَأَرْوَنِي مَاذَا خُلِقَ الذِّينَ مِنْ دُونِهِ بَلِ الظَّالِمُونَ فِي ضَلَالٍ مُبِينٍ



Cases

Dr Rasha Musleh
consultant radiologist



mammographic images show
circumscribed ^{round} oval mass in upper
outer quadrant of left breast.

Spot-compression craniocaudal
image confirms circumscribed

The next step is US to assess
 if it is solid mass or cyst

US



* عشات نفوف
9. Cyst or fluid
Ultrasound

Ultrasound image show 2.9×1.8 cm oval anechoic mass with increased through transmission and imperceptible wall, consistent with simple cyst.. / 2

+ enhancement



Case

Palpable right breast mass

RCC view

R MLO view

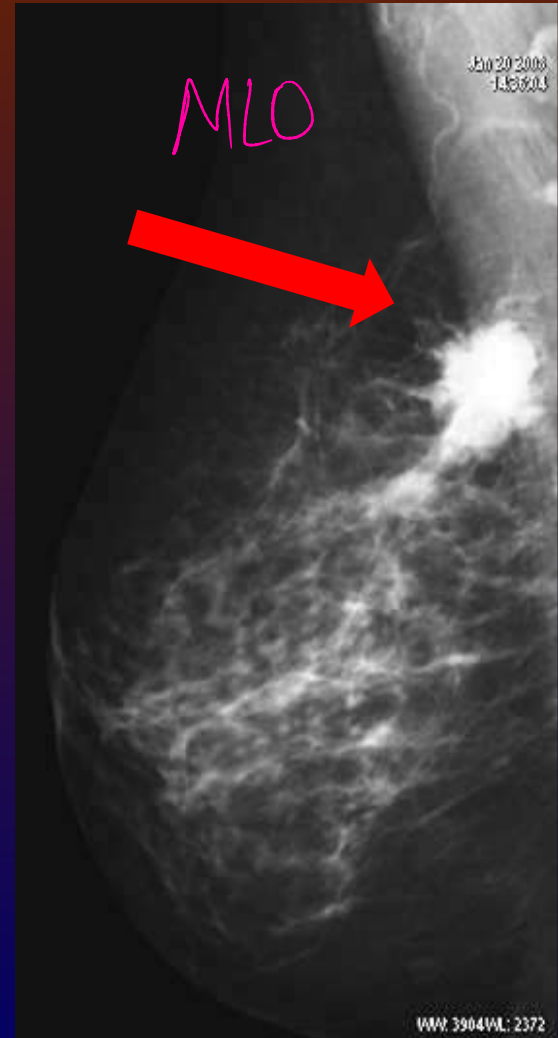
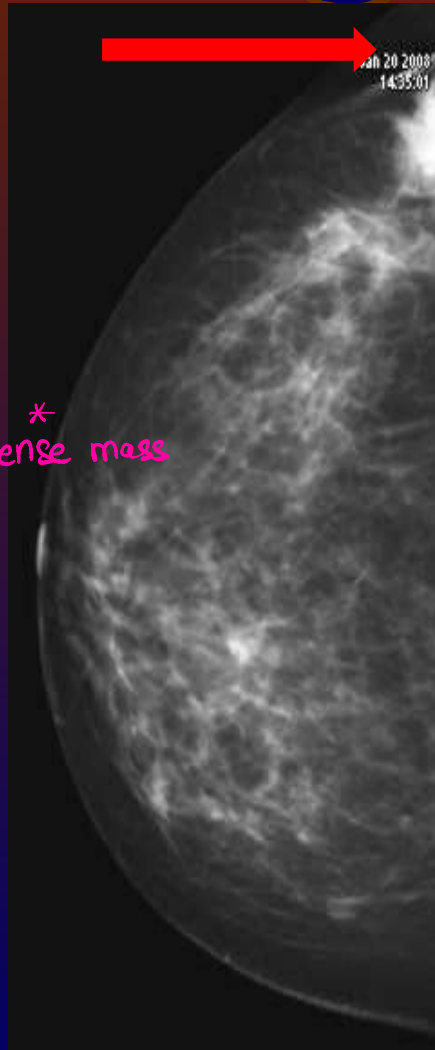
Cancer not
completely
visualized !on
this view

*irregular speculated dense mass
upper outer Rt

شوبعل 9 RCC
"لمايكون outer مش مبين"

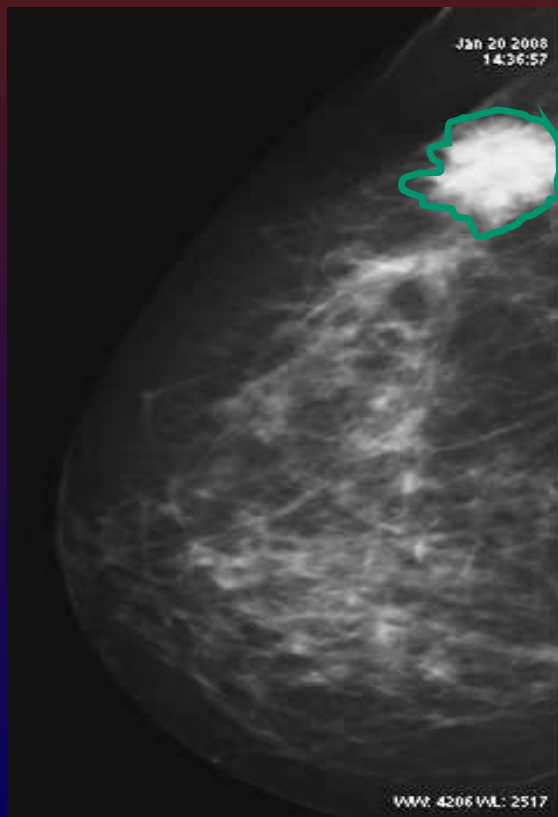
لوكانت Mass في
inner مش مبين 9
Cleavage

بمدين
spot → ultrasound



● Exaggerated CC view (XCCL) ✓

عشان اچوف
ال outer اصبع



1) mammo

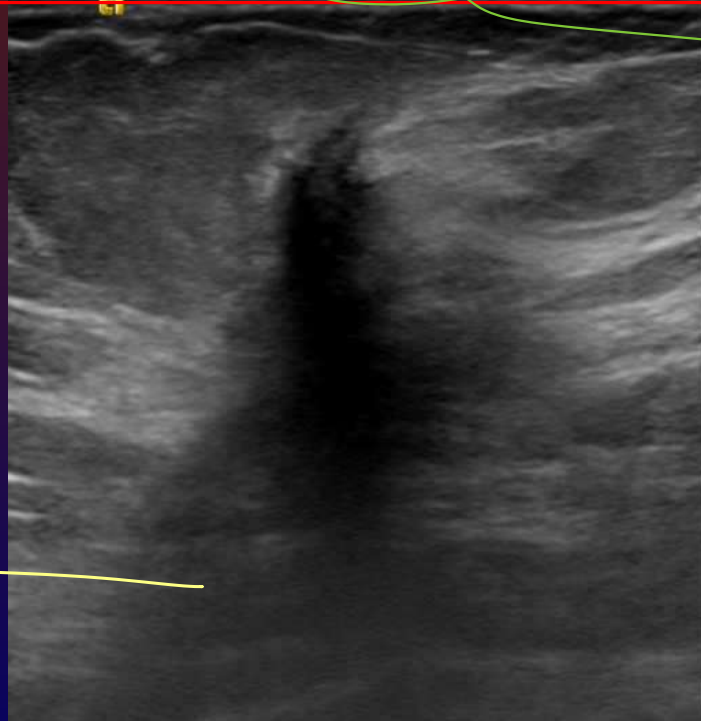
Then ...

2) spot

3) ultrasound

Irregular spiculated dense mass at upper outer deep right breast .irregular spiculated hypoechoic mass with posterior shadowing at ...oclock of right breast

hypoechoic



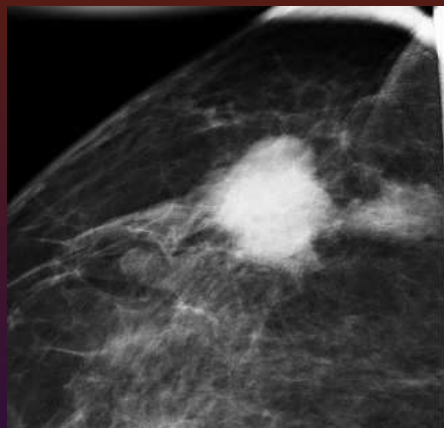
* BIRADS 4

* Shadowing



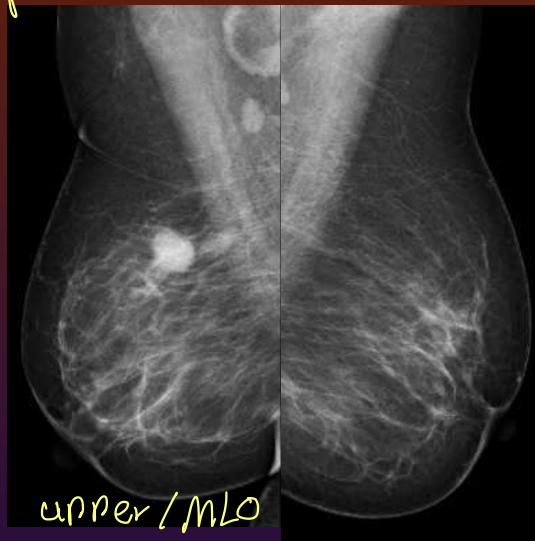
Case

- Screening patient she had multiple previous images with likely benign right breast mass .
- Her last report labeled as BIRADS 2

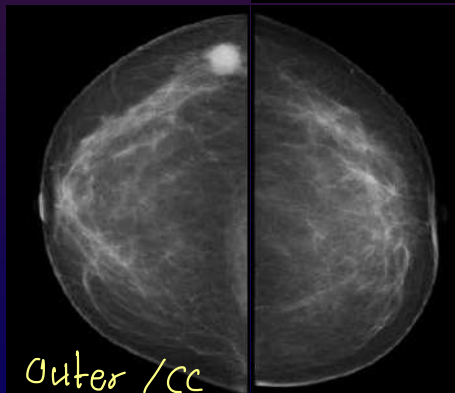


Rt

Lt



upper / MLO



outer / CC

x Irregular mass
not round
بشکل نامنظم

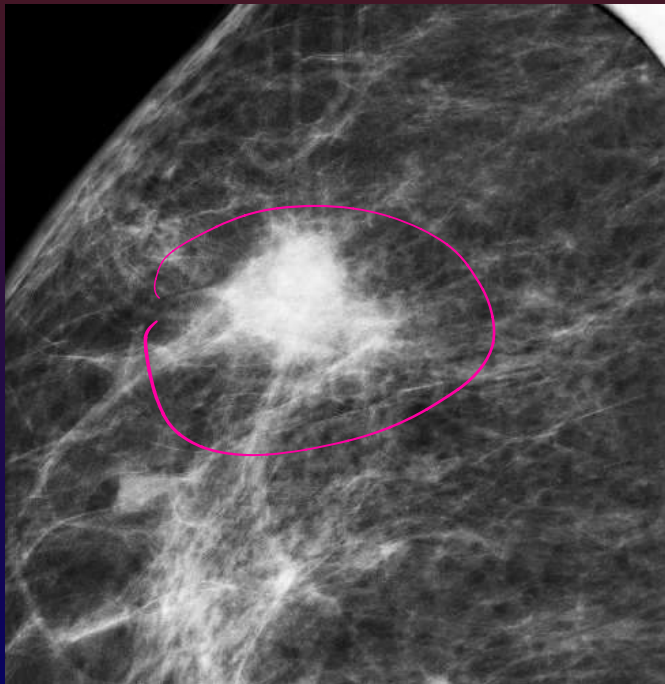
این است که به این شکل 4

⊕ Rt. breast
upper and
outer

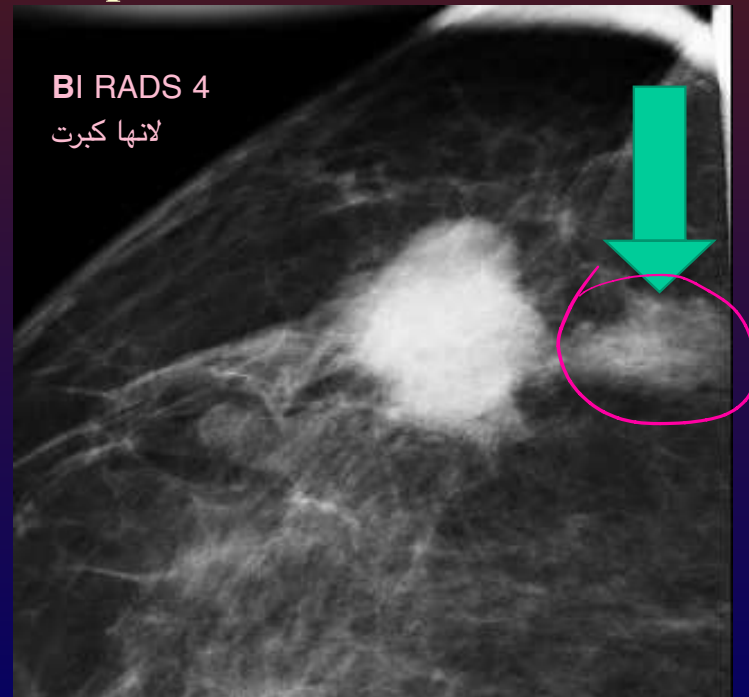
SPOT
Increase size of irregular mass and now with
posterior extension

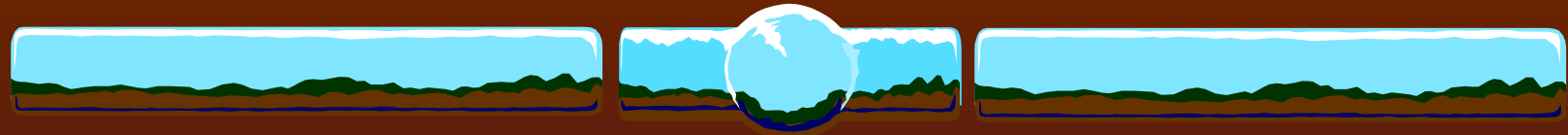
* مجموعہ اکبر
ہیور قدیمہ

6 Nov 2012



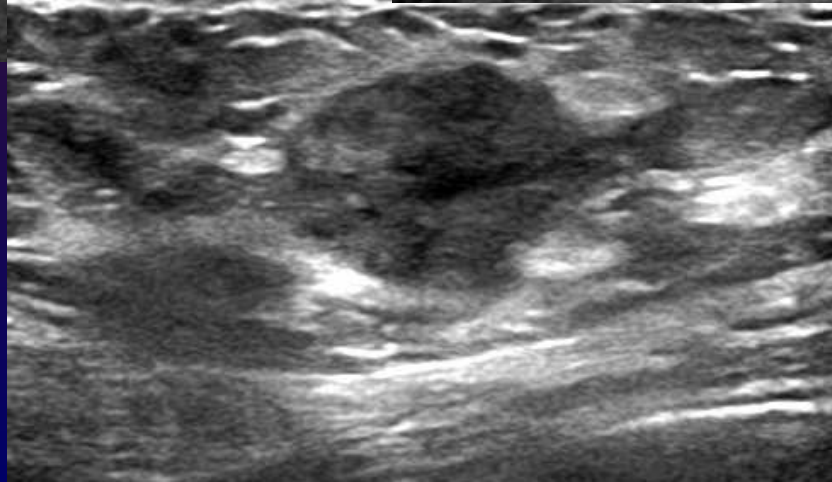
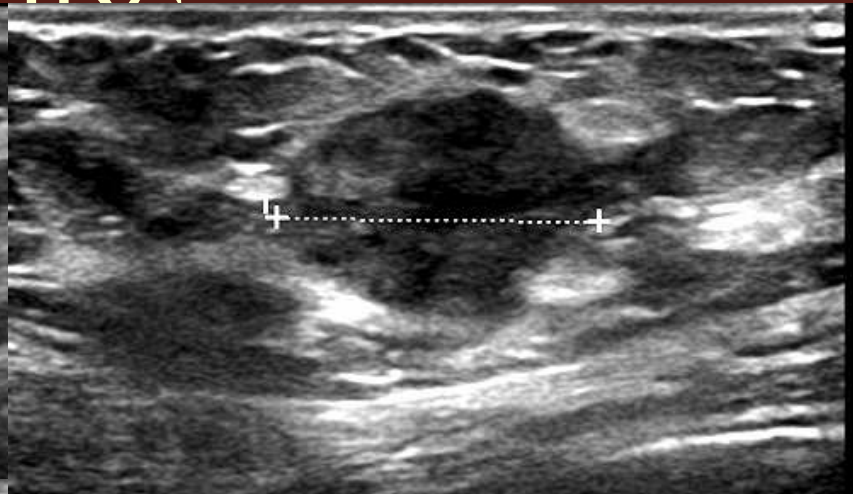
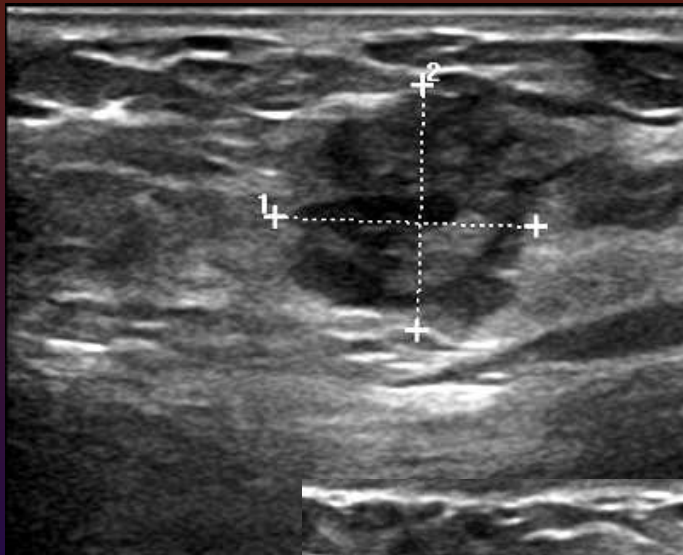
2 Apr 2014





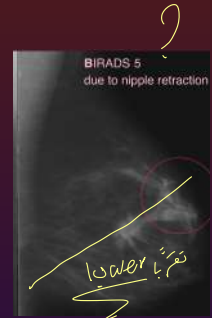
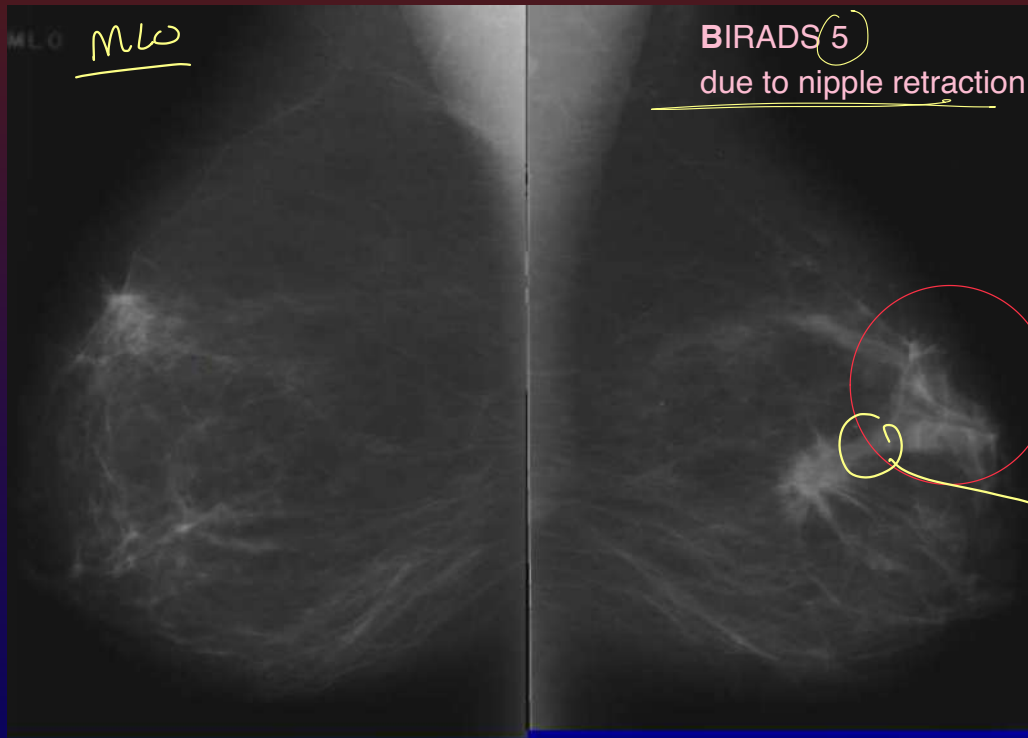
* ultrasound

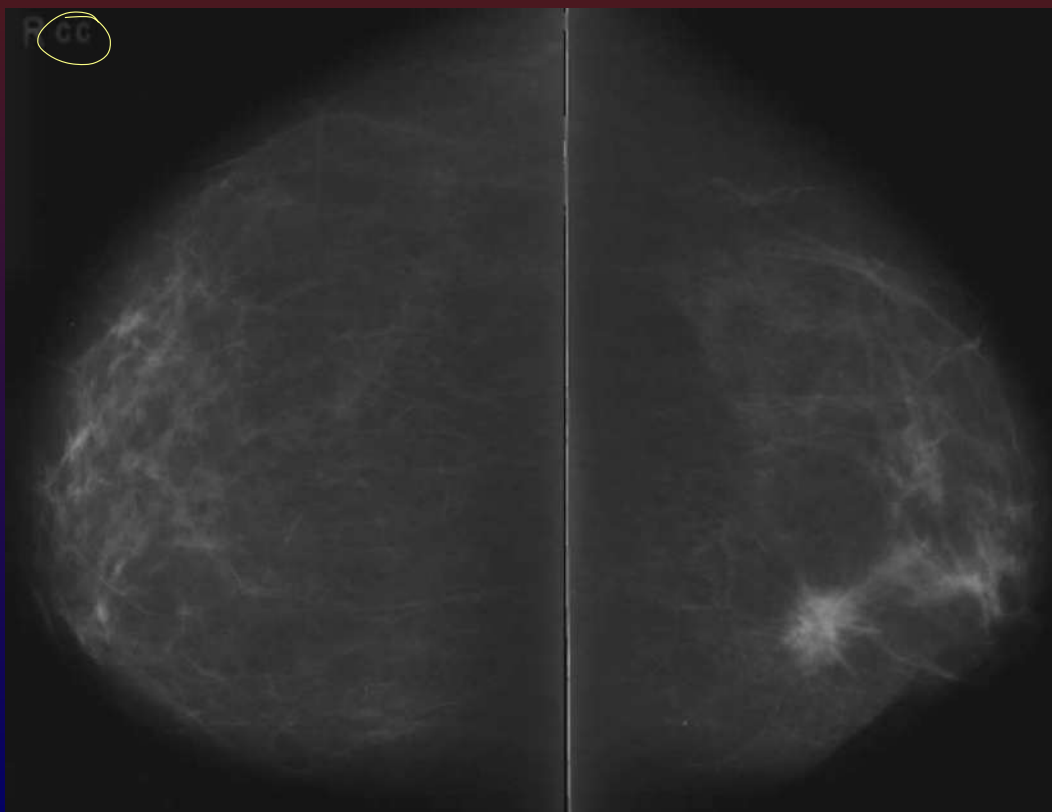
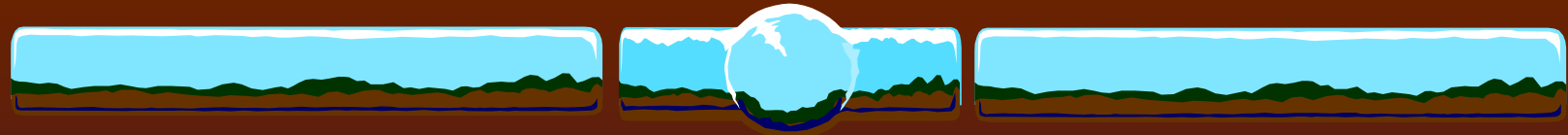
100



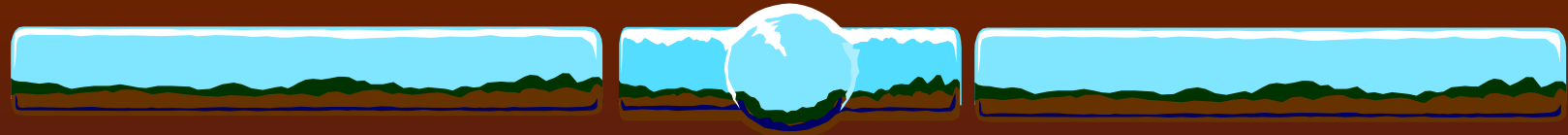
Screening patient

CC → inner
MLO → lower





inner ✓



- Irregular spiculated dense mass at lower inner left breast .



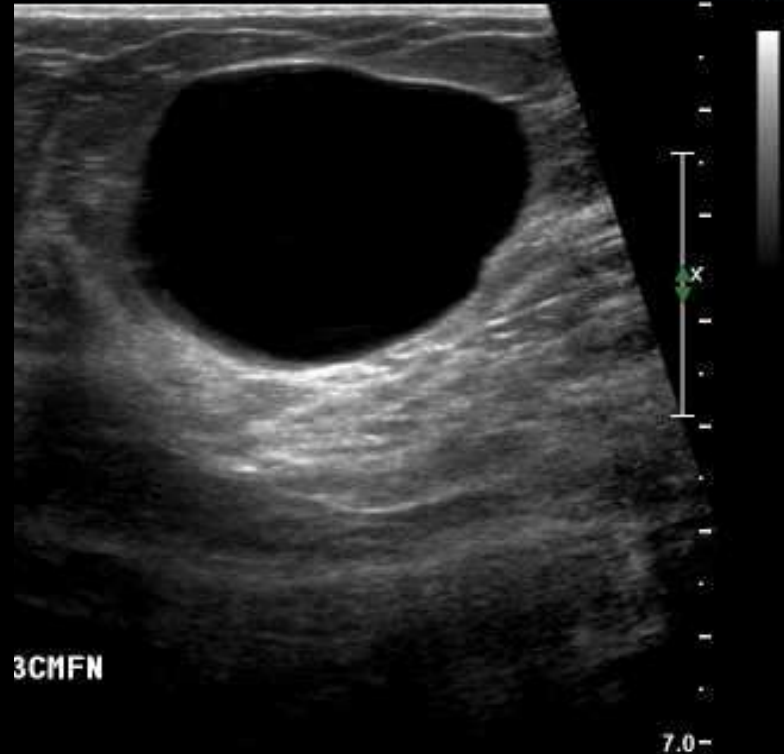
DOB: Apr 23 1948 Age: 058Y F
Id: 001641461
Exam: Aug 17 2006, 11:17:45

R

CC



Premium View v1.0 processing applied

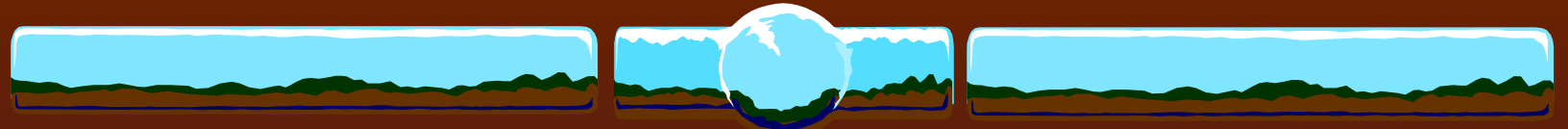


* use ultrasound →
cyst & Fluid * عشان افروغ

Simple cyst

فوت بمبلي

Birads 2 = cyst دائماً



Simple Cyst $\Rightarrow$

Asymptomatic- No further work-up

If internal echoes complicated cyst.

Enlargement in itself is not an indication for intervention.

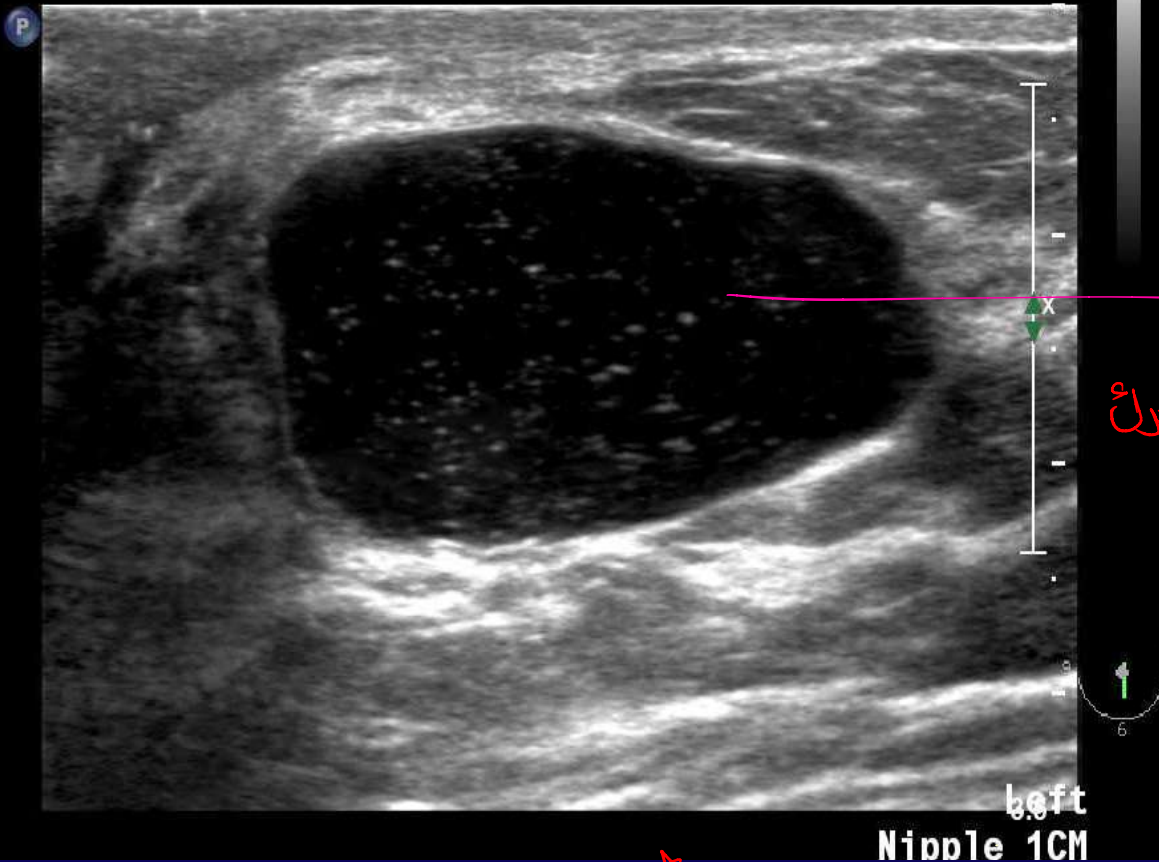
000397751

AGH Breast Center PGH

L12-5/SmPrBst 1

AGC

2/2/20
2:03:48 P
M3518



هناك نسيج الـ US
يعتبر تصوير فيزيو
واسمى بتحرك في السائل
فمثل اشئ مهم

Benign

اسمها Debris

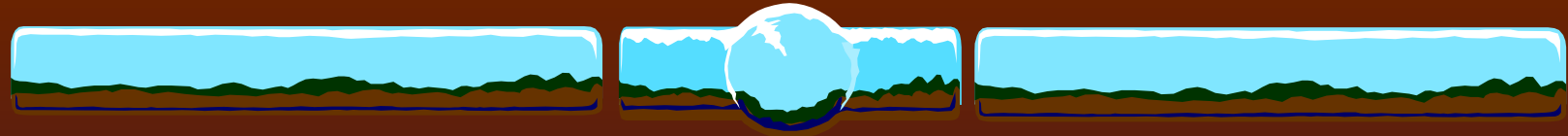
نفتا
بيخه
في اسئ بتحرك

نسيج صلب
Fibro
Adenomey

نسيج الـ
debris
صافي مقوماته
فعليا

complicated cyst with internal echoes

BIRADS 2



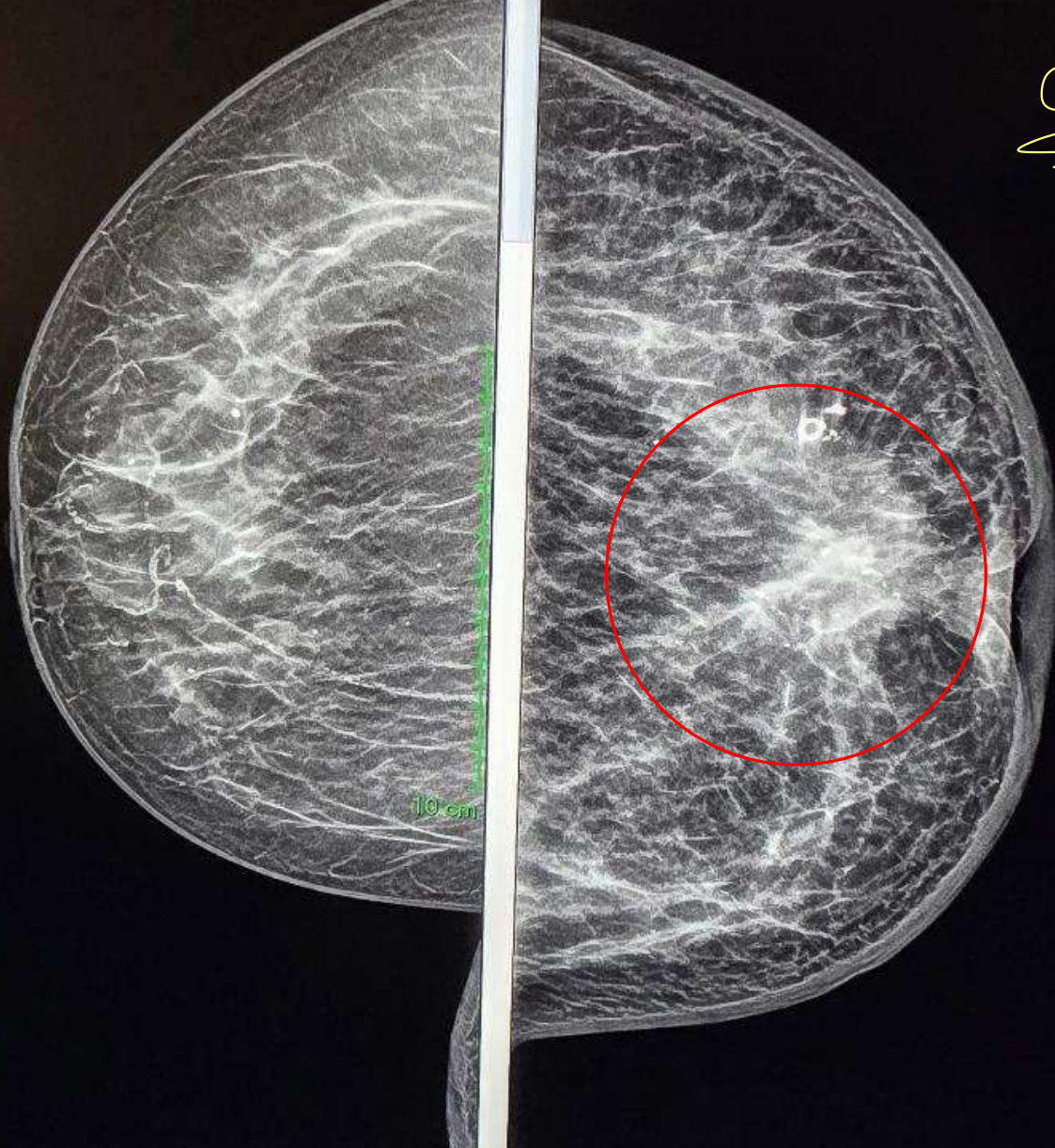
Screening



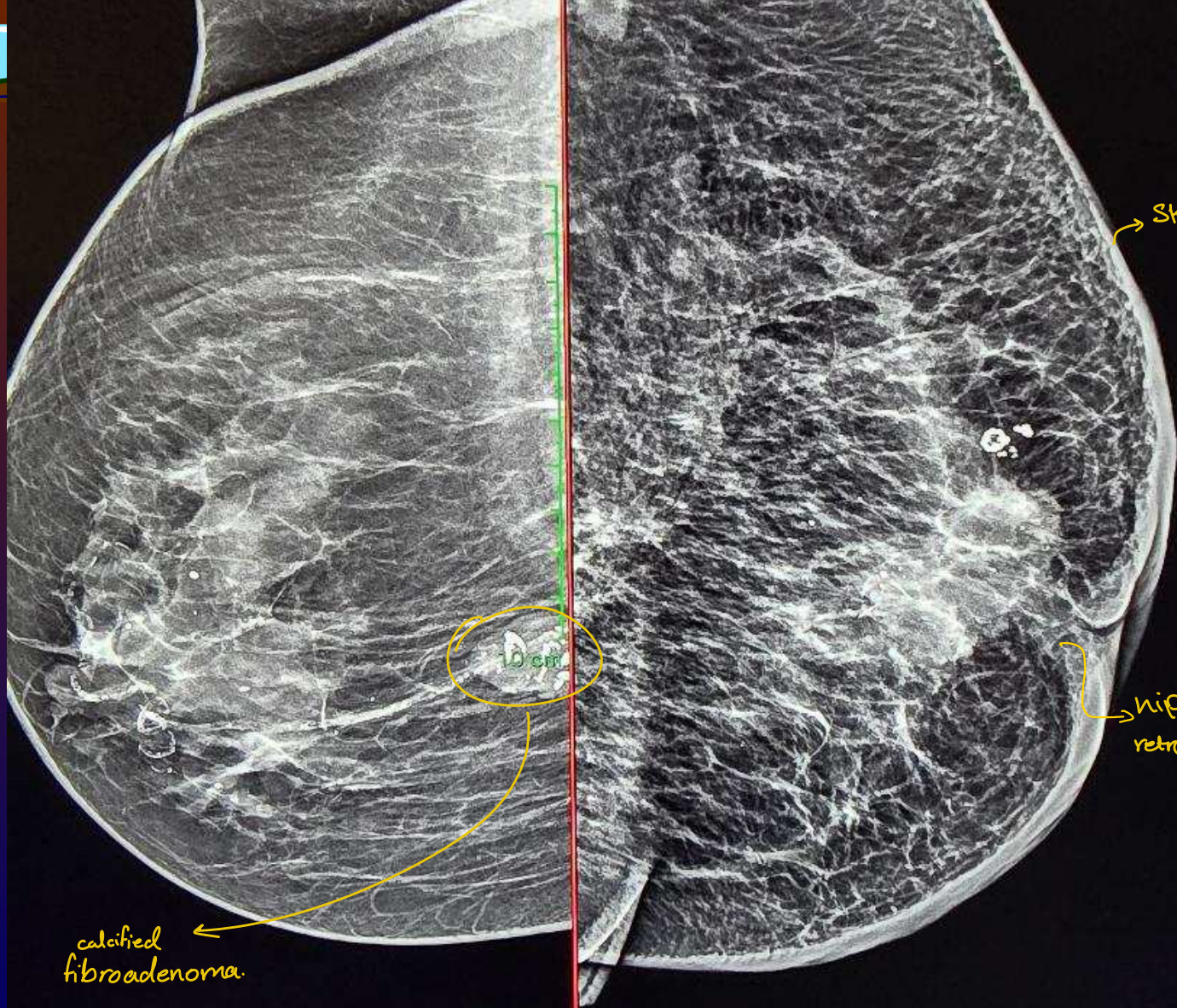
BIRADS → 5

Nipple retraction and palpable mass ?

دسترس دیاگنوسٹک



CC



→ Skin Thickening

→ nipple retraction

← calcified fibroadenoma.

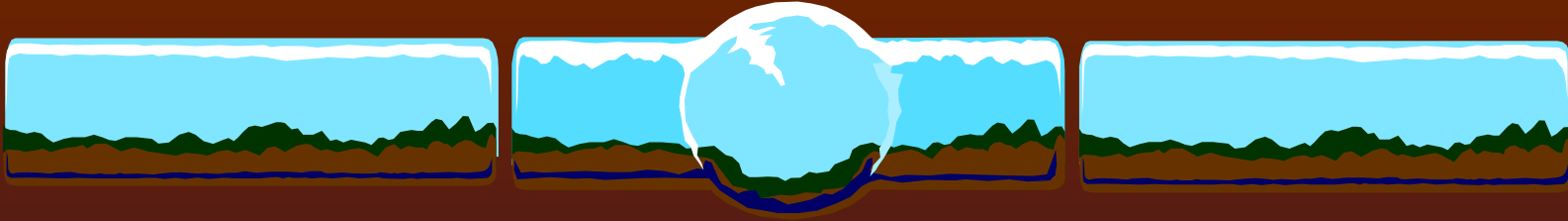
2122



Rt
↘



- Left : irregular [☆] spiculated dense mass at left retroareolar area associated with diffuse left breast skin thickening and left nipple retraction. (5)
- BIRADS 5
- RIGHT : [☆] circumscribed oval dense mass with ... calcification at ... pop
fibroadenoma

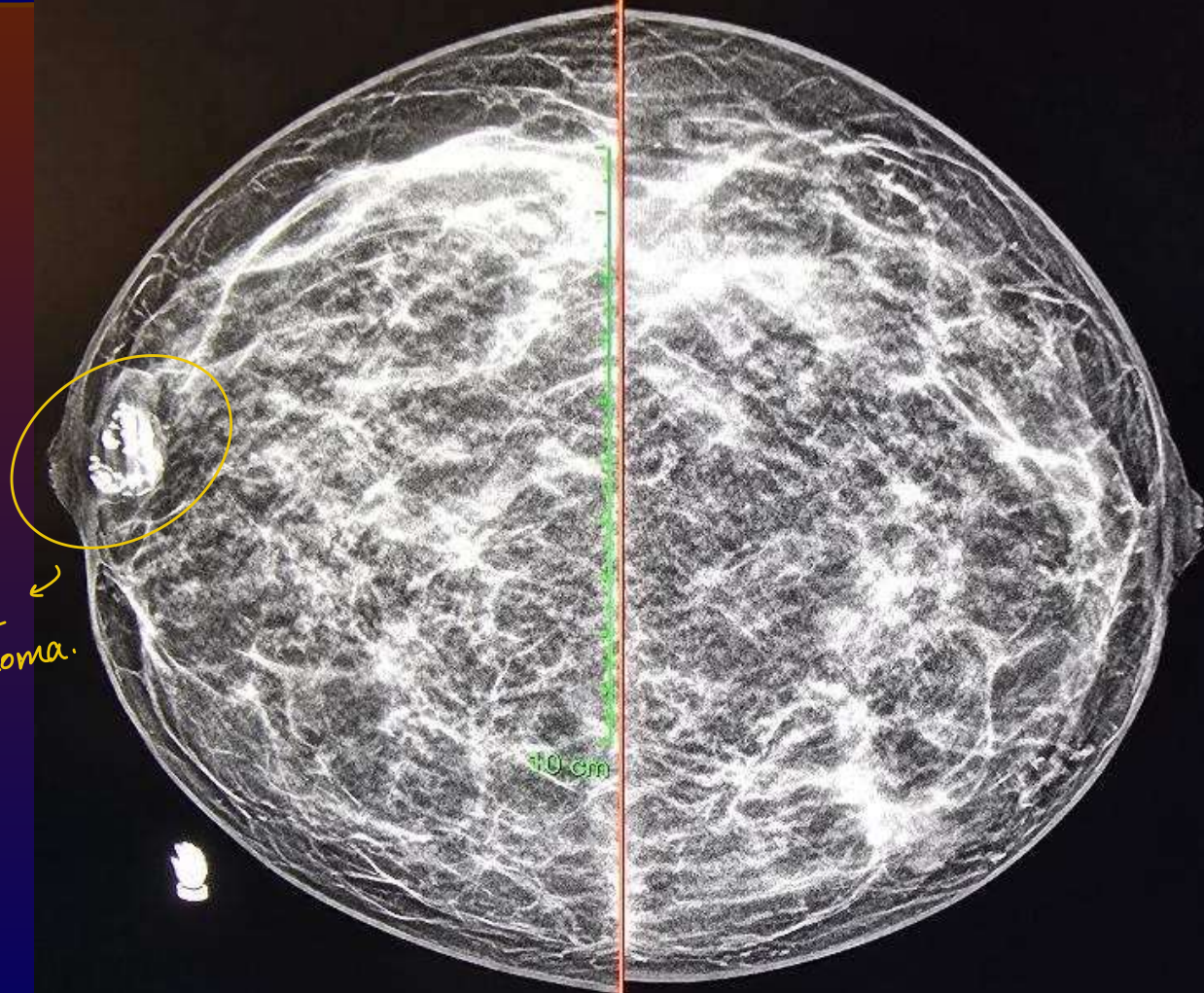


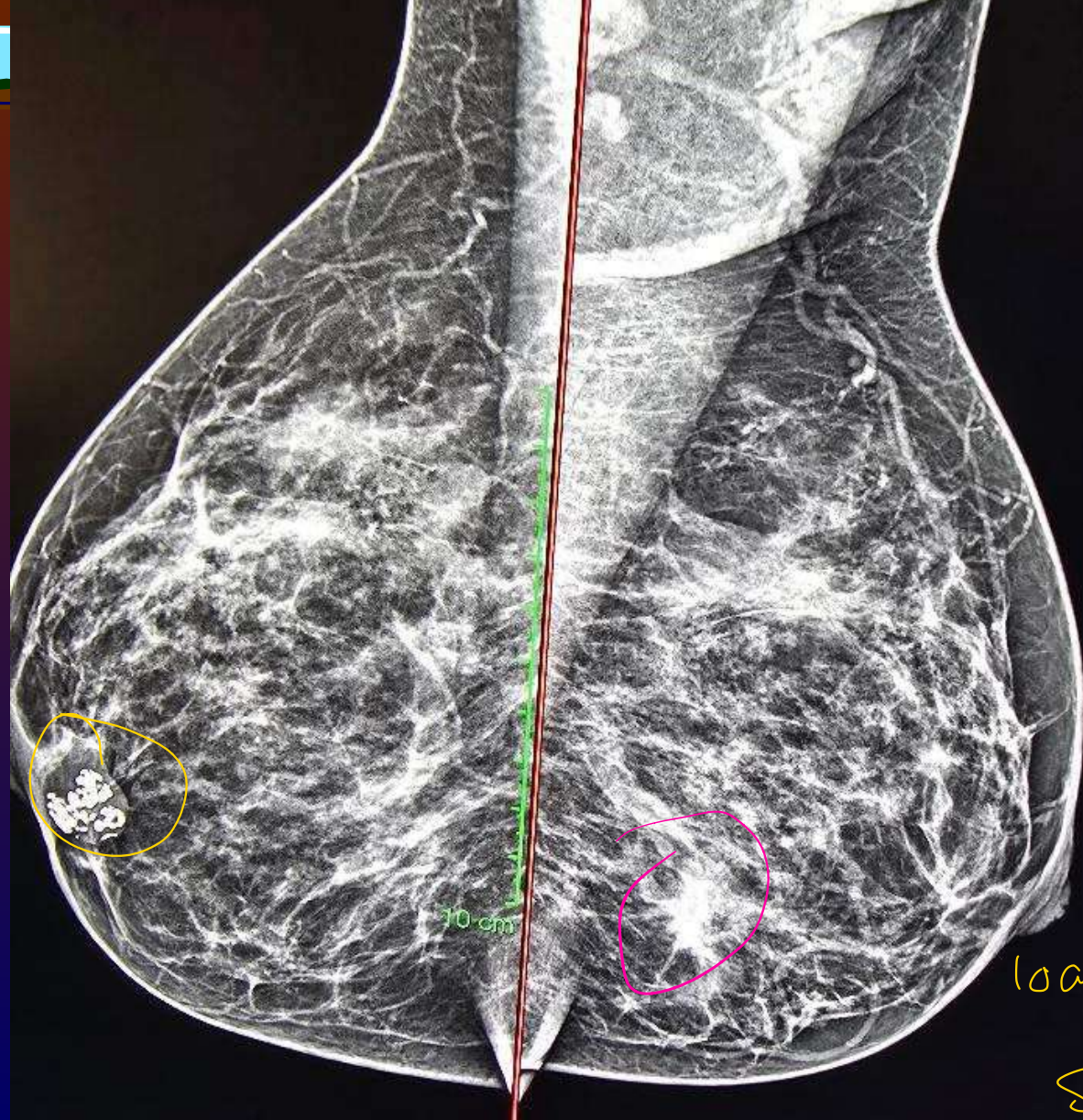
31 years old female with likely
benign breast mass for follow up
she is planning for IVF?

أطباء اناس

↳ hormonal therapy
may affect.

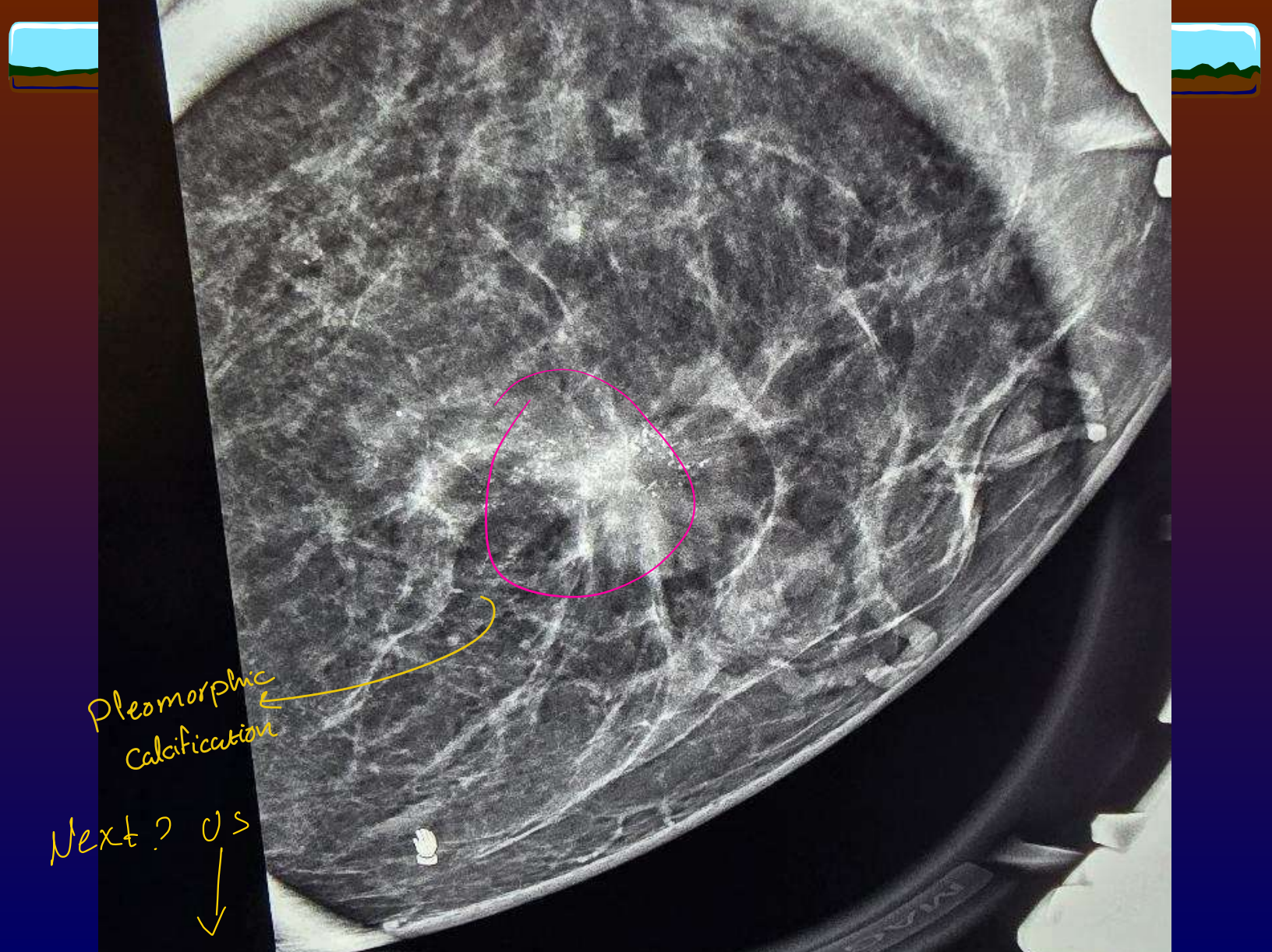
fibro-
adenoma.





lower → next ↘

Spot



Pleomorphic
calcification

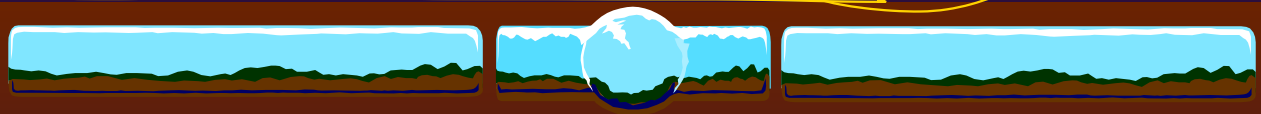
Next? US
↓

US

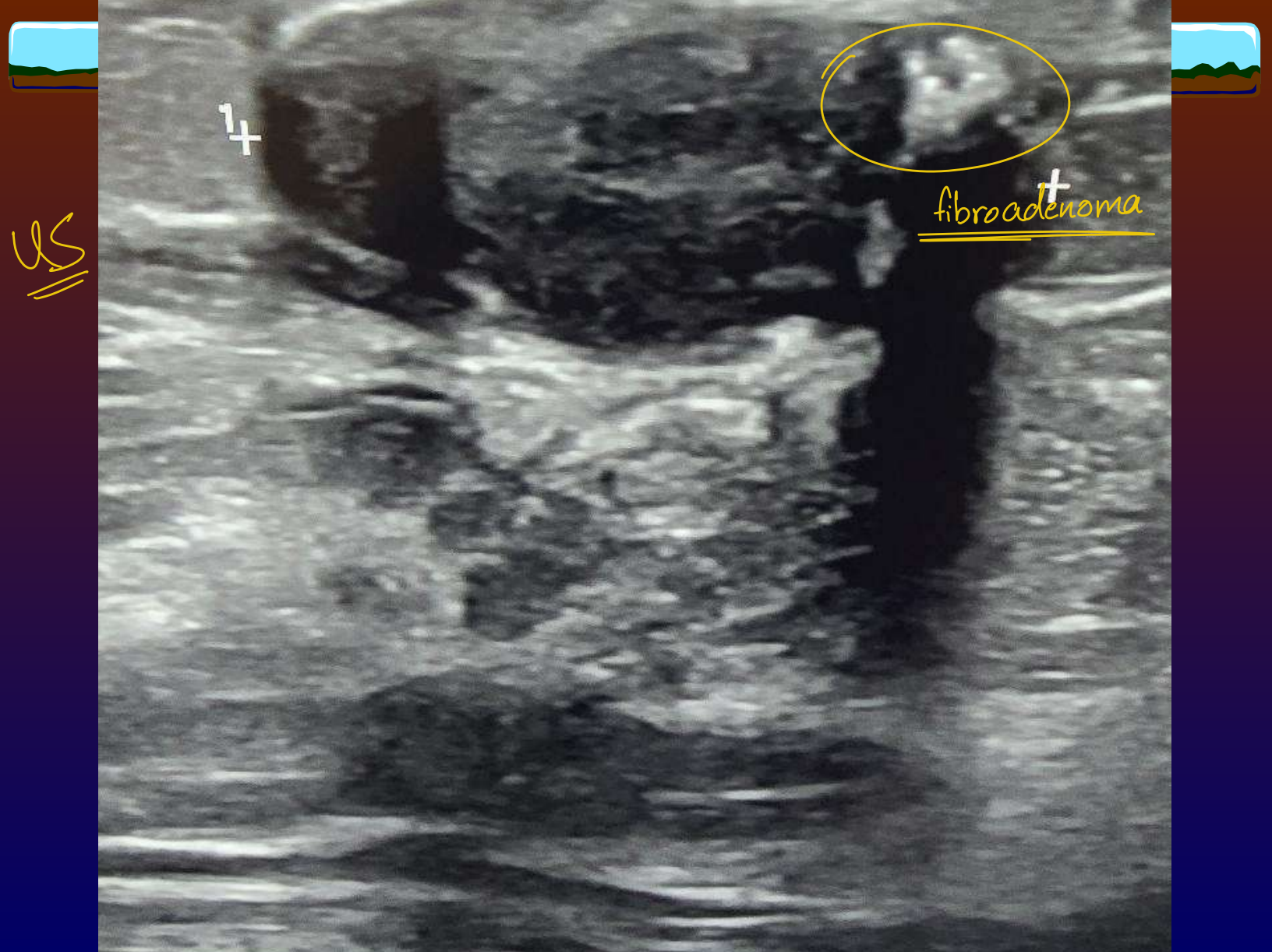


BIRADS
4

- Left :irregular spiculated dense at lower inner left breast it is containing pleomorphic calcification and it appear as irregular HYPO??HYPER ECHOIC with echogenic rim on U/S



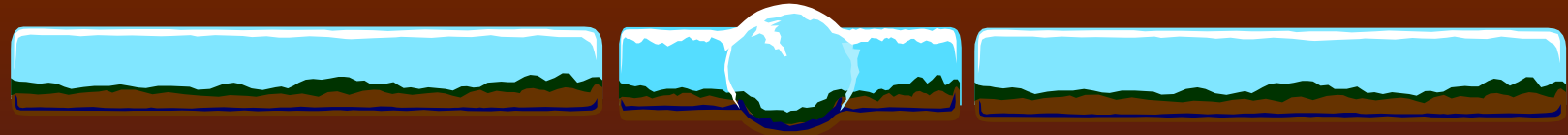
- Right “ circumscribed oval hypoechoic mass with shadowing macrocalcification at right retroareolar area



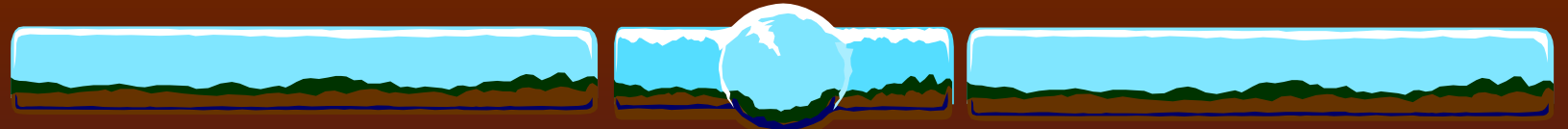
+

fibroadenoma

US



- Right “circumscribed oval hypoechoic mass with shadowing macrocalcification at right retroareolar area”



PREVIOUS BENIGN
BIOPSY now for follow
up





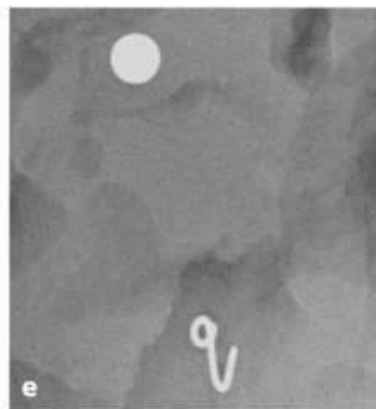
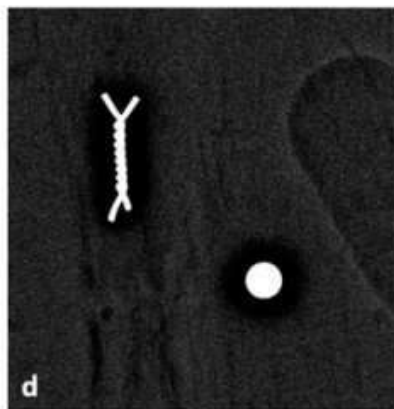
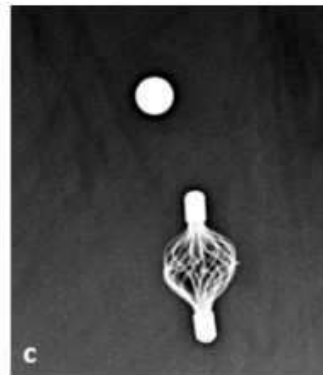
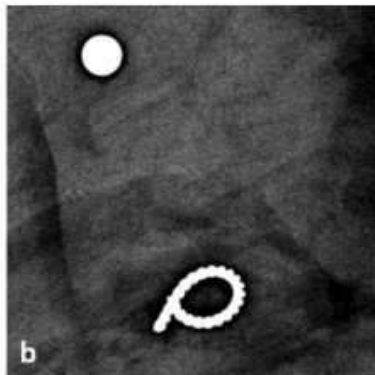
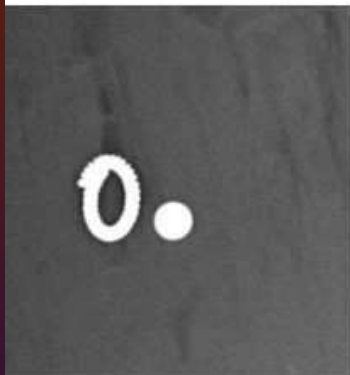
clip



كذلك على انه تم
أخذ biopsy من صبي
المنطقة



عشان لو شيعت مكانها
ما انظر اشياء الصدر
كامل احتياط (Mastectomy)

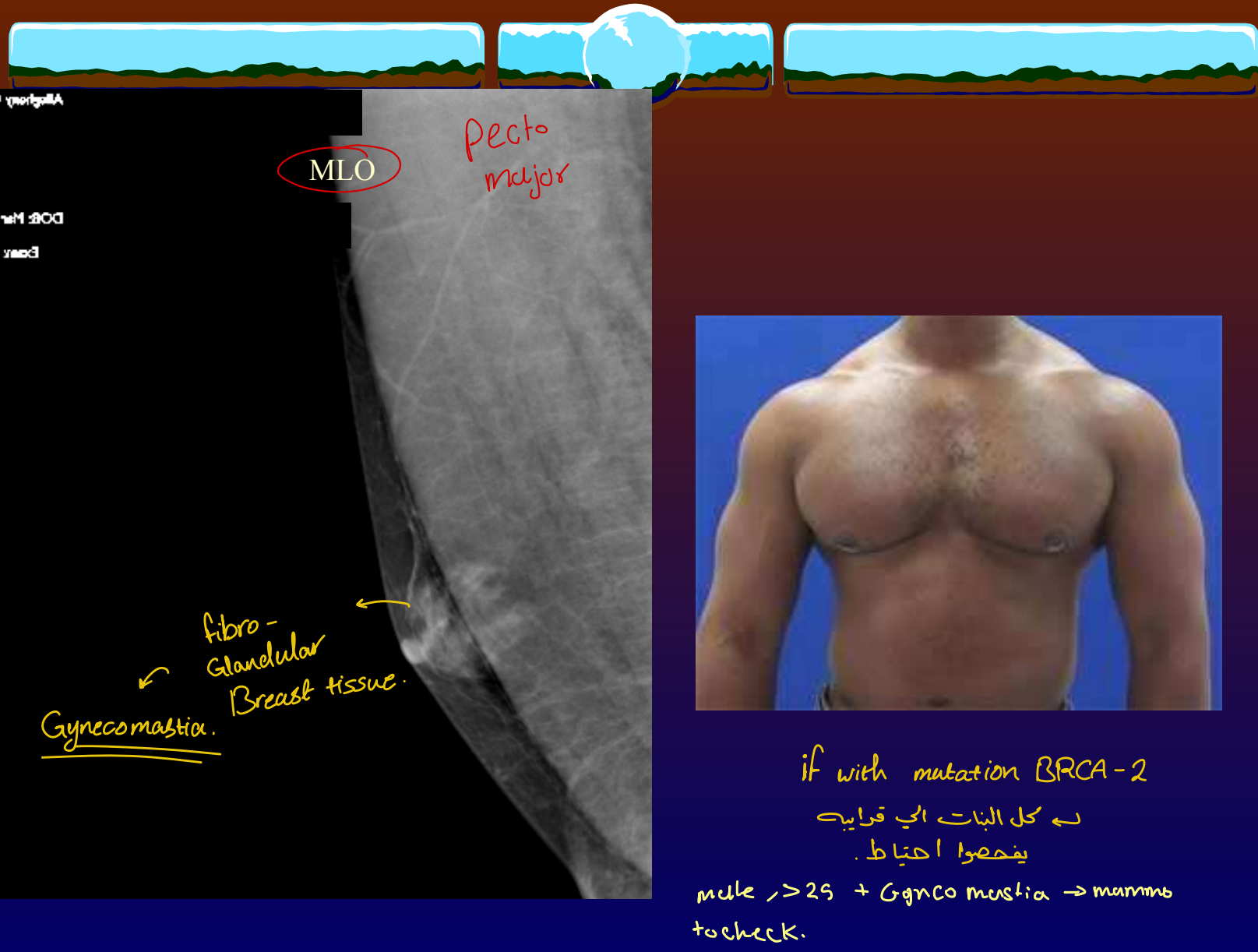




- 
- [☆]Tissue marker or clip of previous biopsy .
-

Previous
biopsy

لـشـهـوـلـوـلـو



MLO

Pecto
major

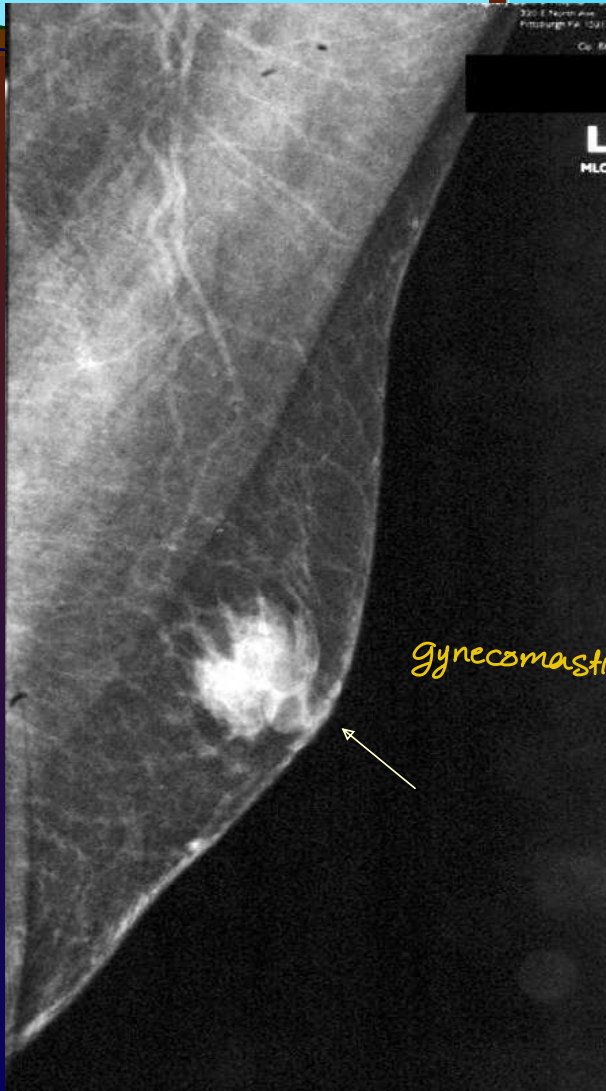
fibro-
Glandular
Breast tissue.
Gynecomastia.



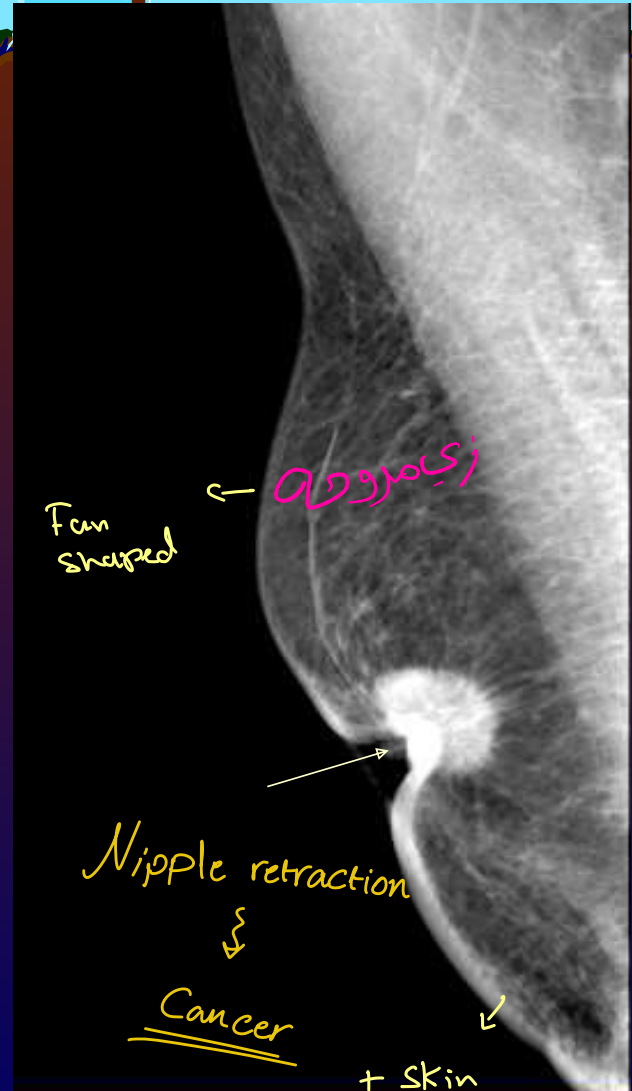
if with mutation BRCA-2

كل البات الي قرايت
يفحصوا احتياط.

male > 25 + Gyncomastia $\rightarrow$ mammo
to check.



G.M.



CA

Fig. 1. CC-L

Gynecomastia

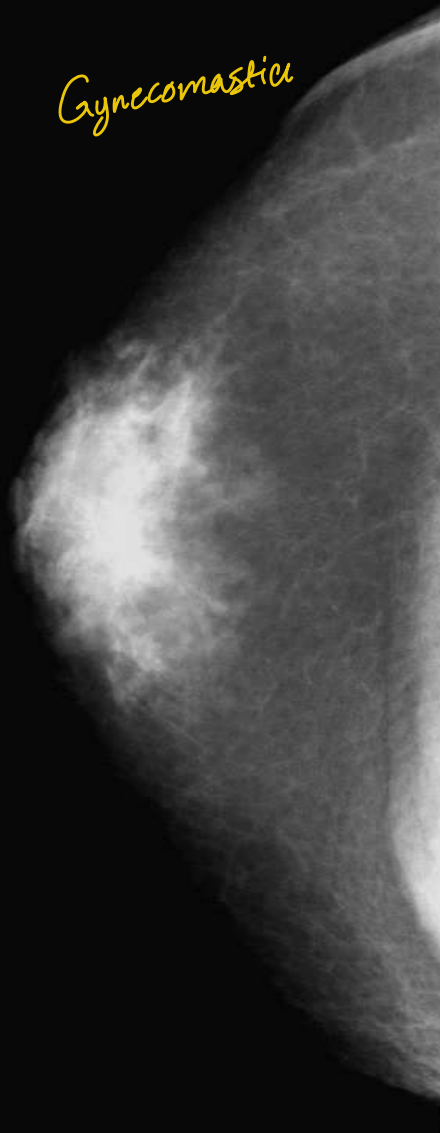


Fig. 2. CC-R

لا ضئى طرق
بين التئين
اليمين من
glands
سيدة

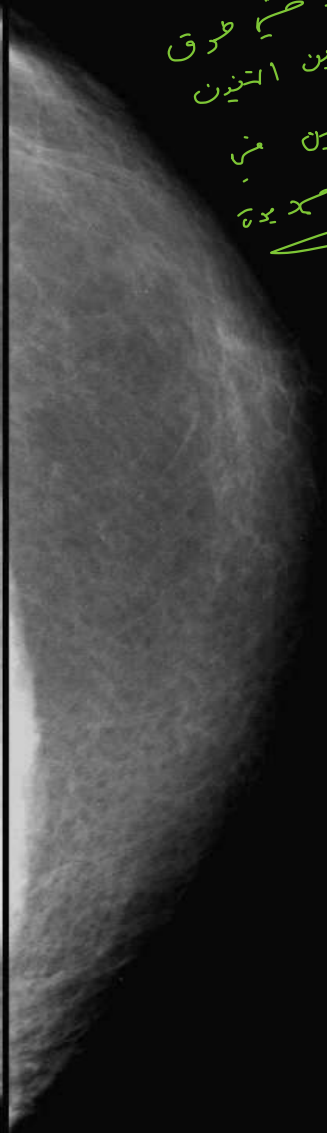
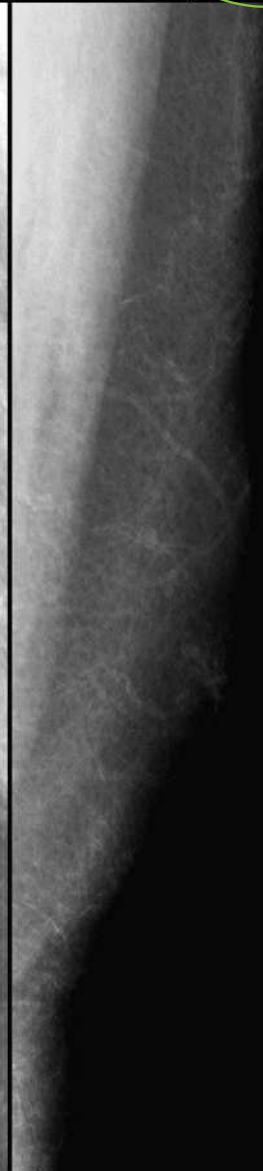


Fig. 3. MLO-L



Fig. 4. MLO-R





Gynecomastia

كيف الجول؟ Fem. or male

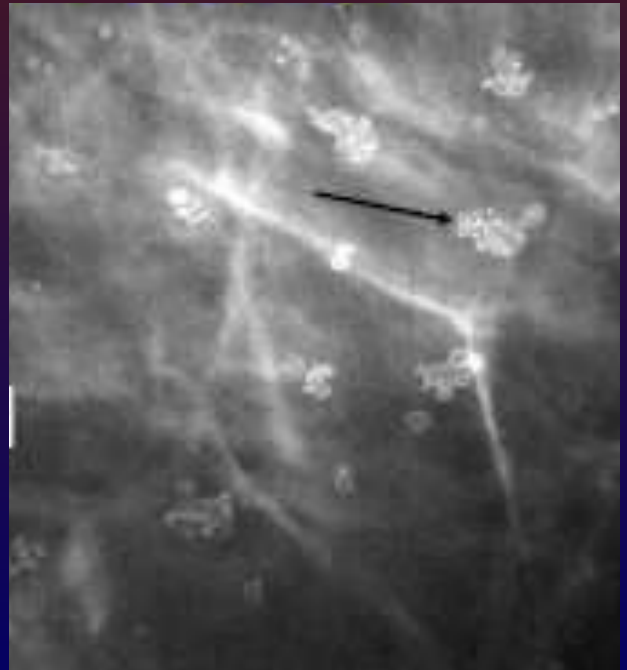
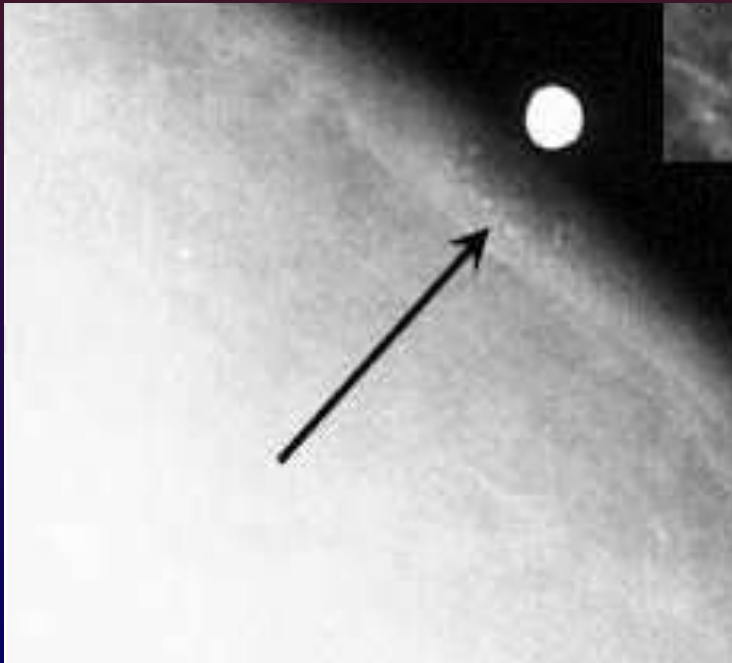
* breast small ✓
* muscle ✓

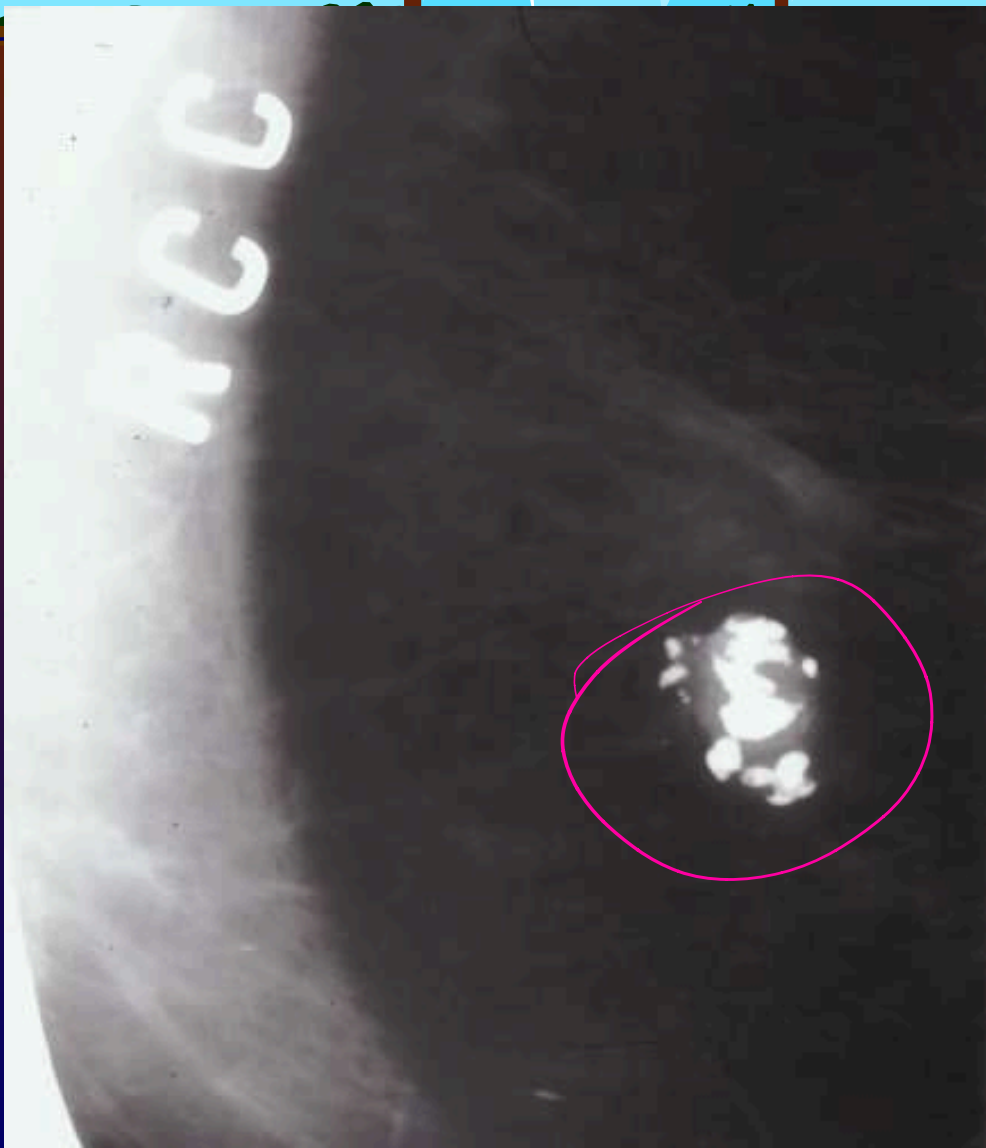
- * Excessive Estrogen
- * Pharmacological- marijuana, cimetidine
- * Pathologic- Testicular neoplasms, Klinefelter's
- * Bimodal age- puberty and 50

image

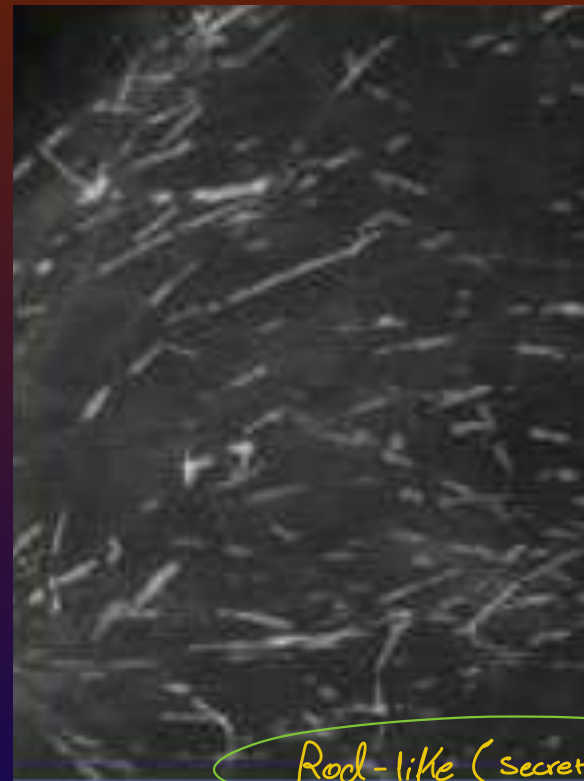
Skin

- ✱ Lucent-centered
- ✱ Tangential views





pop
②



Rod-like (secretory)

SEGMENTAL

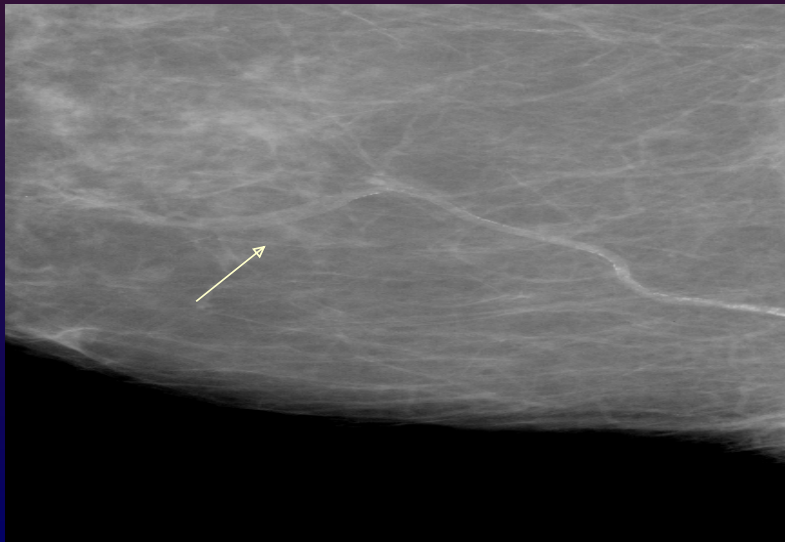


pleomorphic

Vascular

- "Tram-tracking" appearance
- Linear / tubular deposits associated with blood vessel shadow .association with coronary artery disease

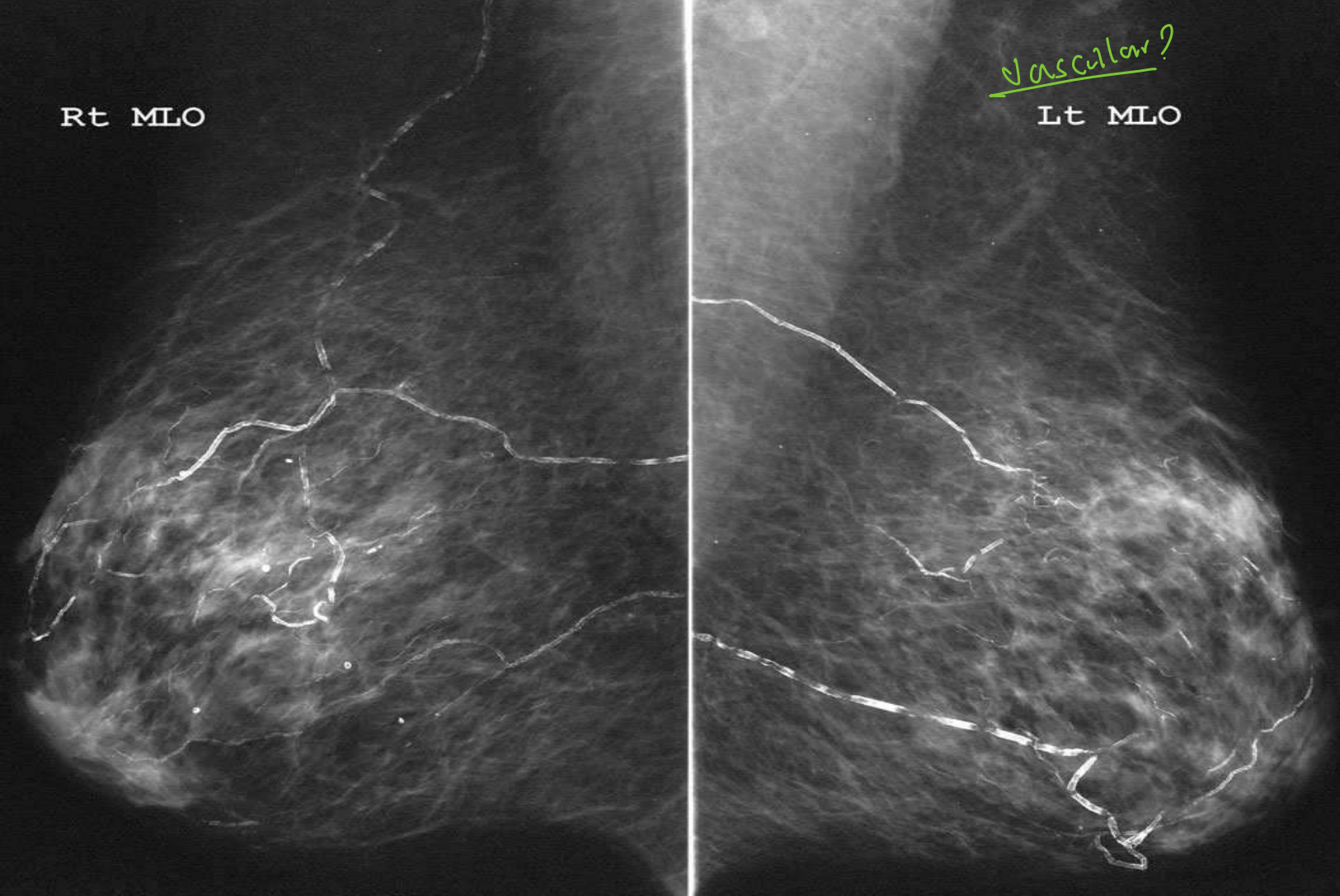
BIRADS 2



Rt MLO

Nonvascular?

Lt MLO



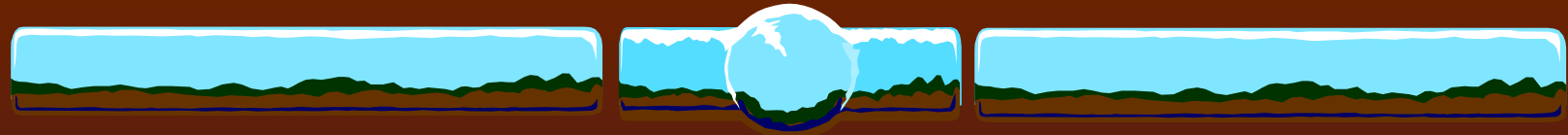
What type of calcifications?

Coarse

- "Popcorn-like"
Degenerating fibroadenoma^A

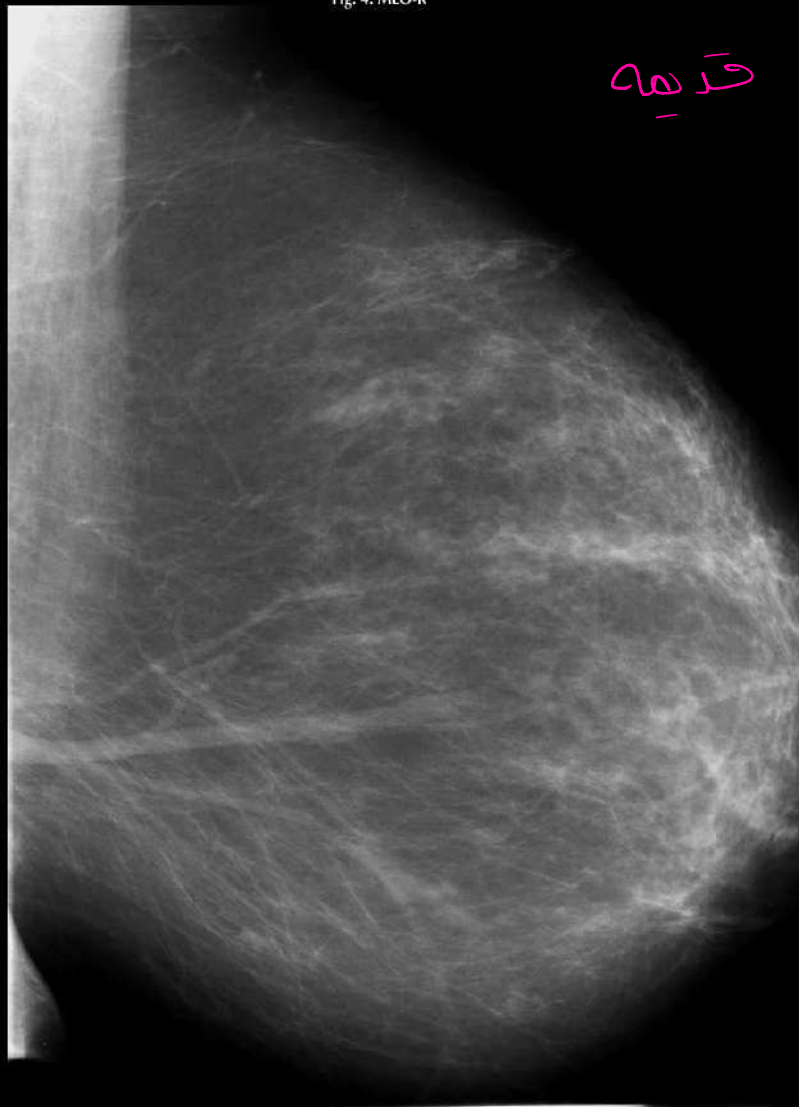


cluster
بکلو
Micro
not
Macro



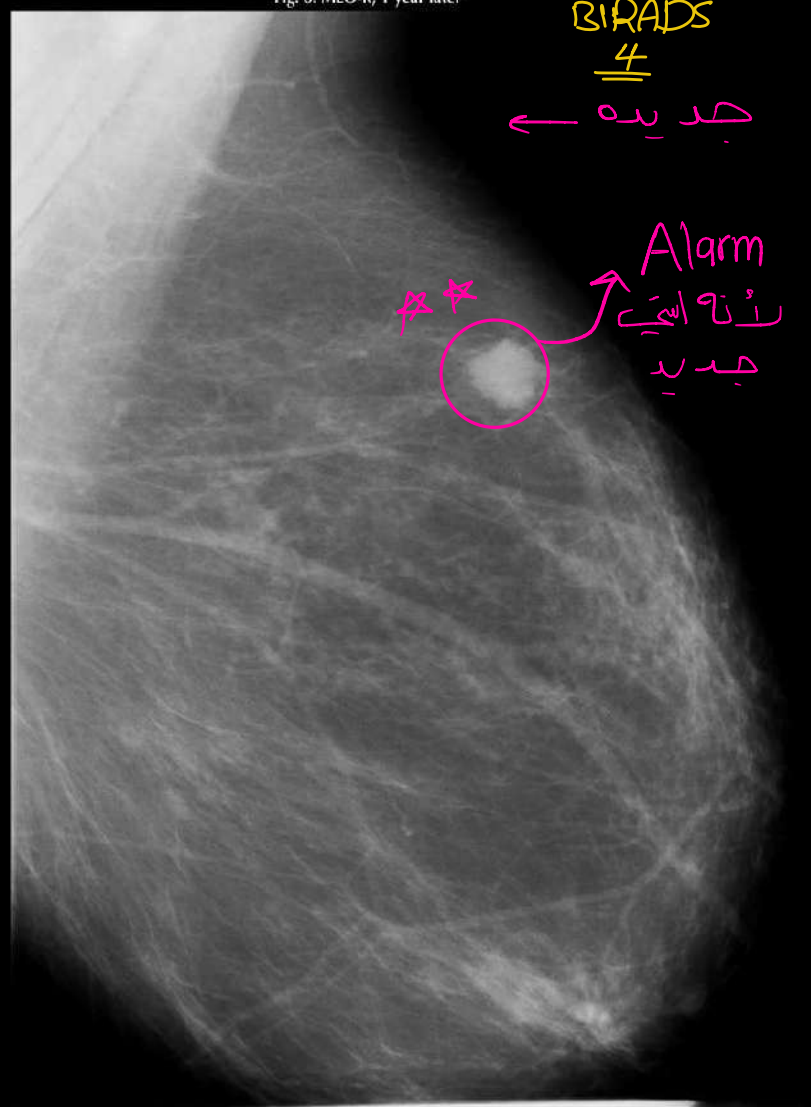
55 YEAR OLD FEMALE
DID SCREENING OUTSIDE
CAME FOR SECOND OPENION

Fig. 4. MLO-R



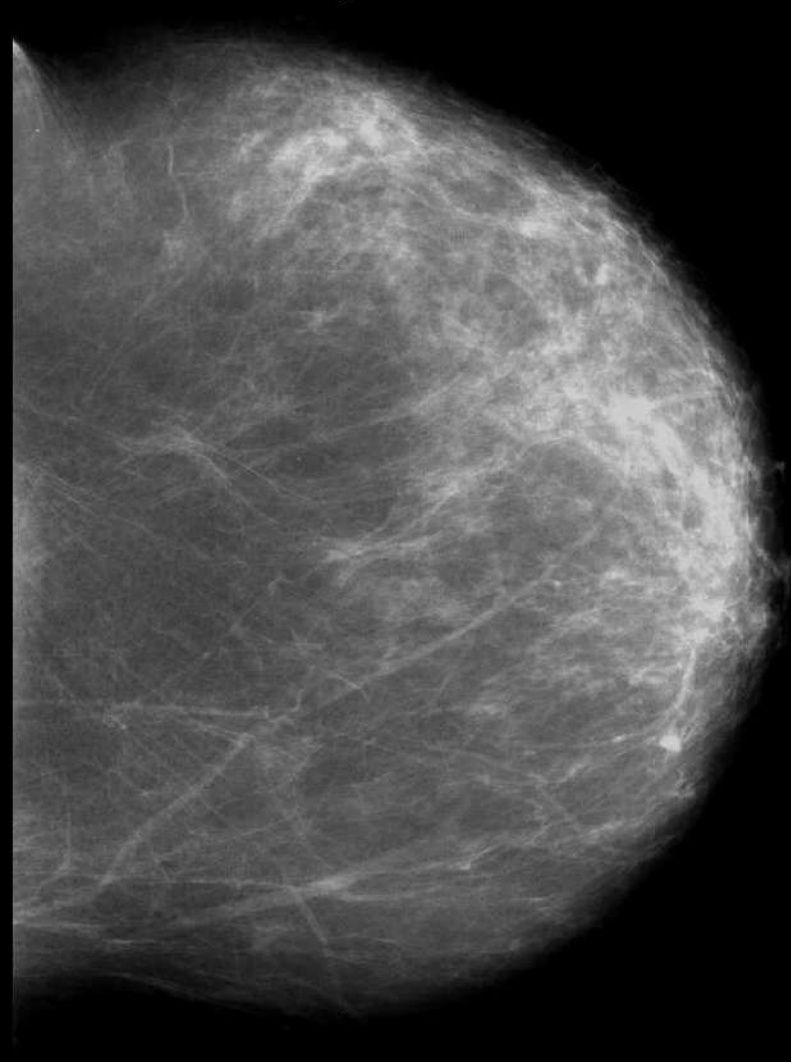
Previous

Fig. 8. MLO-R, 1 year later



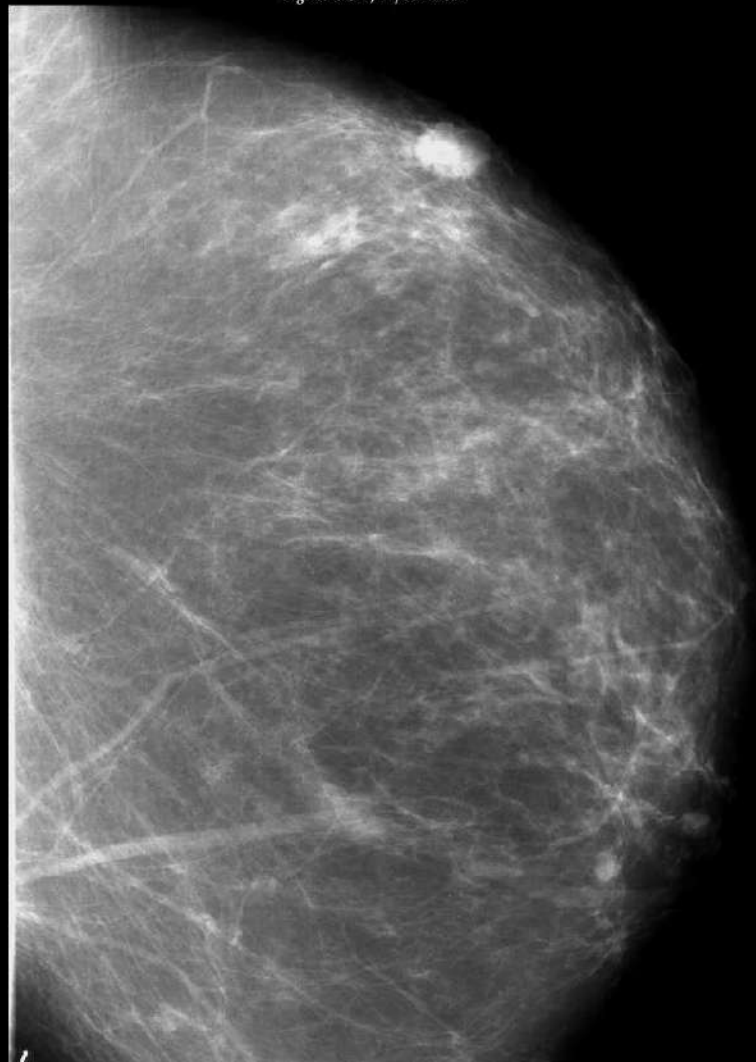
Current

Fig. 2. CC-R

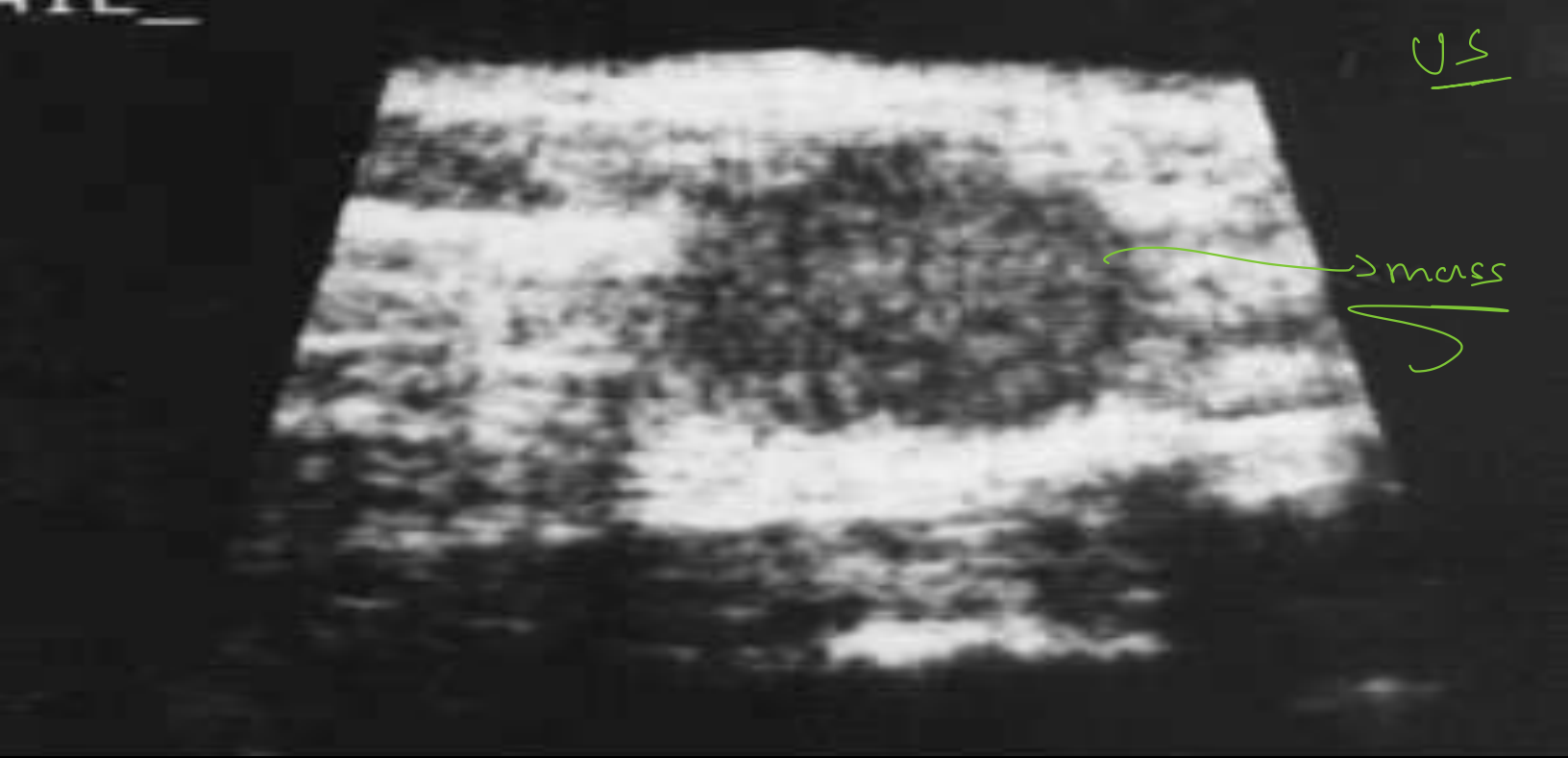


Previous

Fig. 6. CC-R, 1 year later



Current



Ultrasound



Case

65 year old for routine screening mammogram

Fig. 1. CC-L

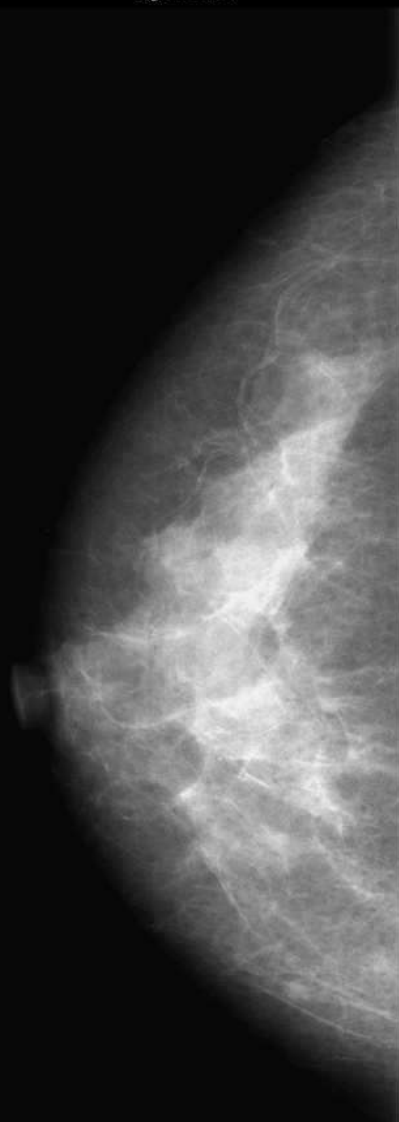


Fig. 2. CC-R

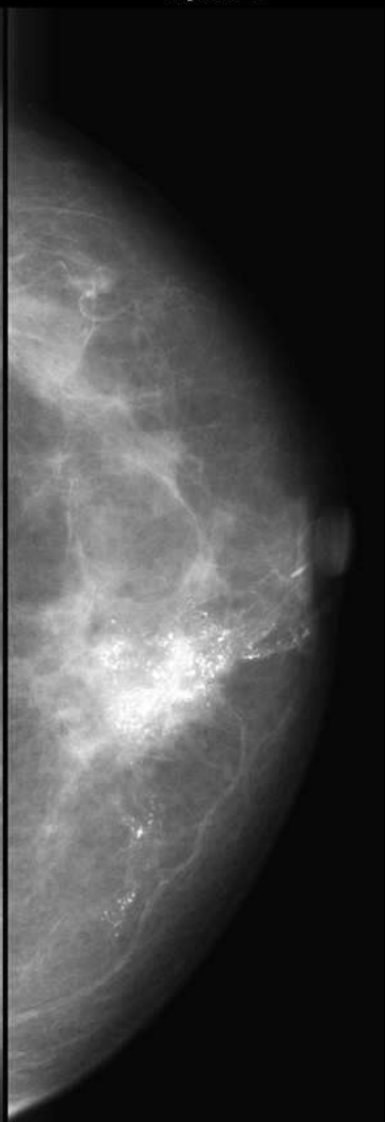


Fig. 3. MLO-L

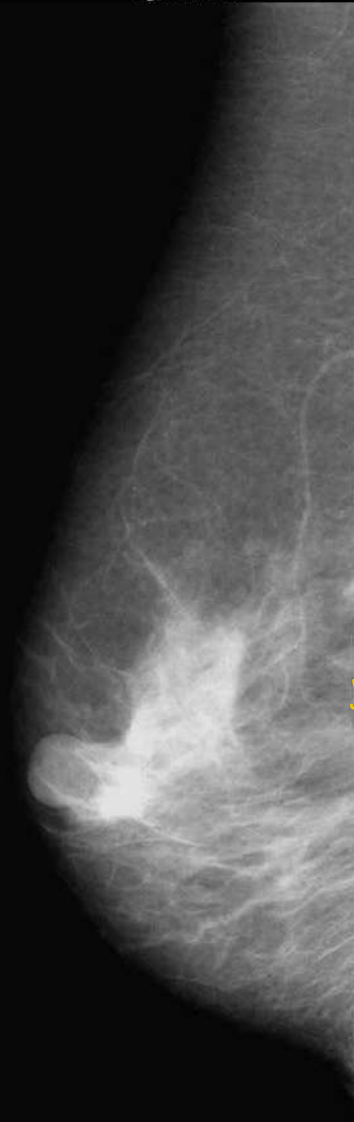
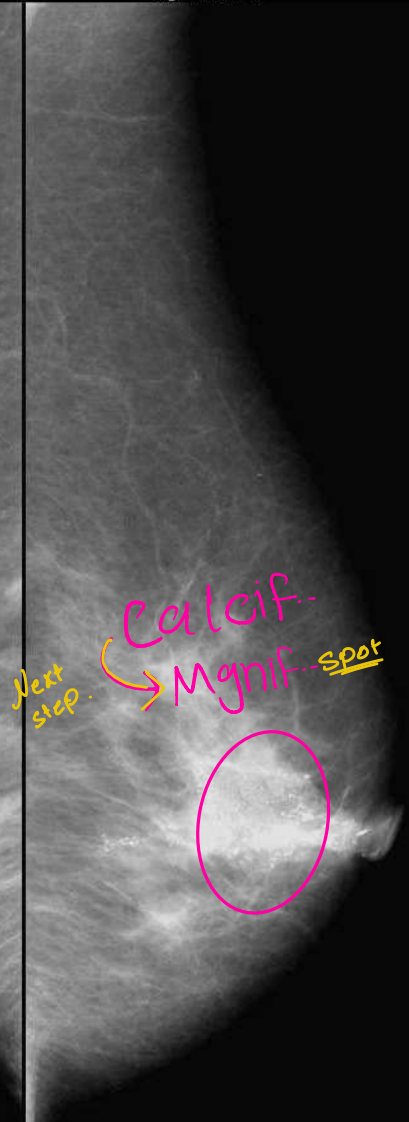
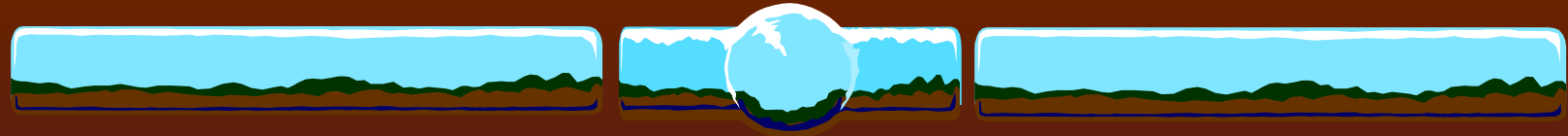


Fig. 4. MLO-R





Next Step



pleomorphic?

Spot mag view



Enlarging likely benign
mass in 25 years old
female

LOGIQ

خبریت
phylloides



في فئة

Benign

Intermediate

Malignant

هو متى صا من لازم ييشال
لأنه بكون بسرعة

Aggressive

phyllodes

Enlarging mass even if it was circumscribed and with likely
benign feature it needs biopsy and tissue diagnosis so

BIRADS 4



Case

42 year asymptomatic for screening mammogram

Fig. 5. CC-L, implant-included

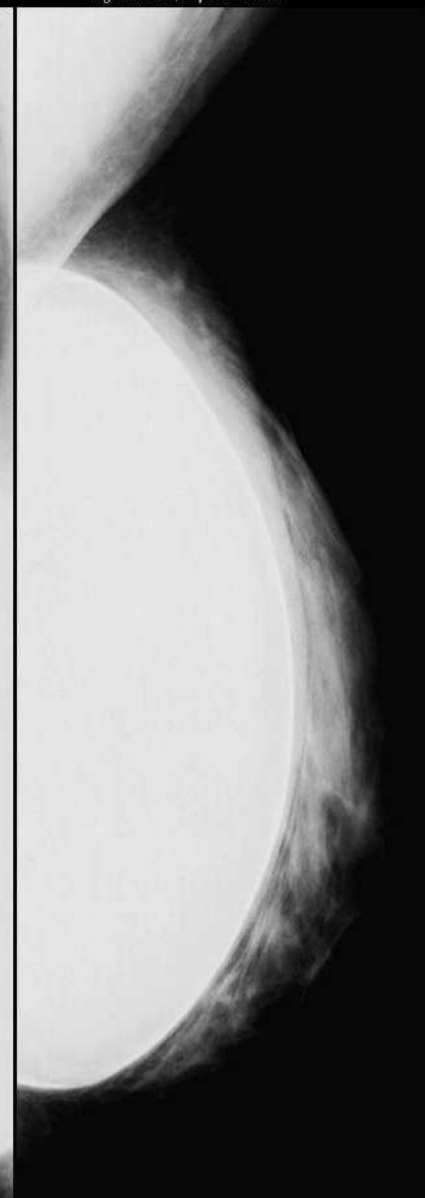
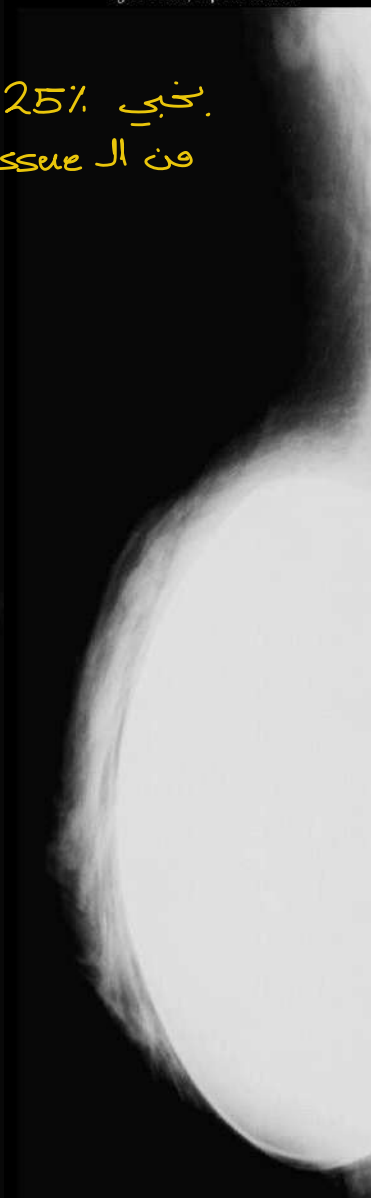
Fig. 6. CC-R, implant-included

Fig. 7. MLO-L, implant-included

Fig. 8. MLO-R, implant-included



بخبي 25%
فمن ال tissue





تَكْنِيكُ مَوْهْمِ لَسْتَقُونِ سِيلِيَعُونِ



{ Implant displaced view

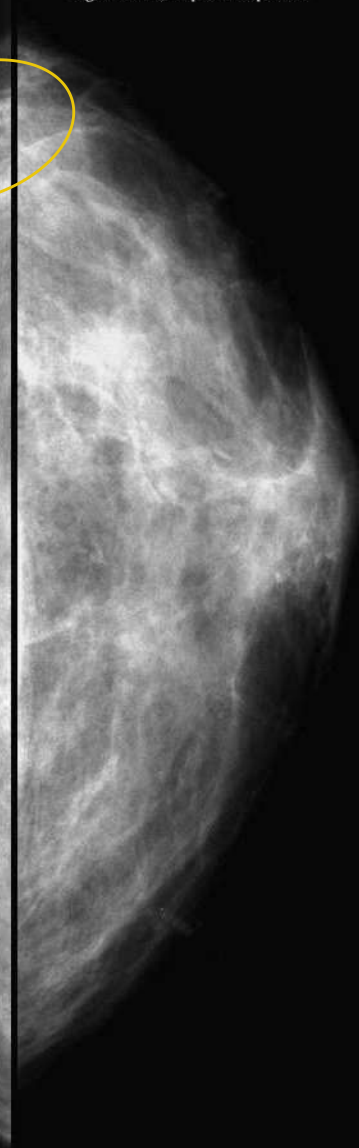
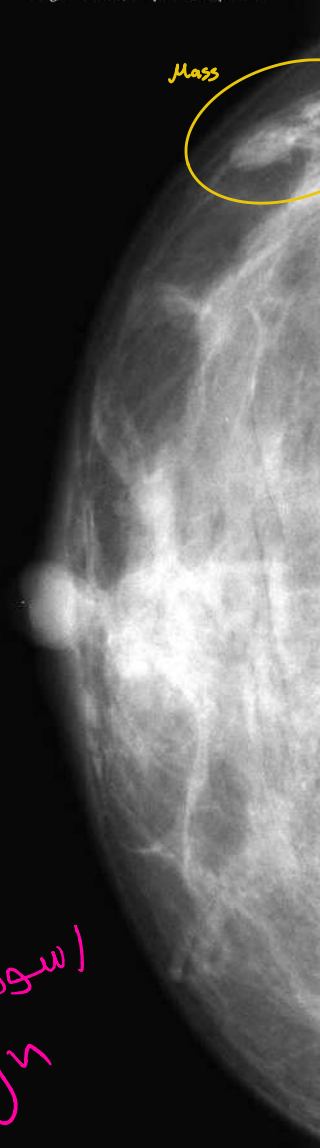
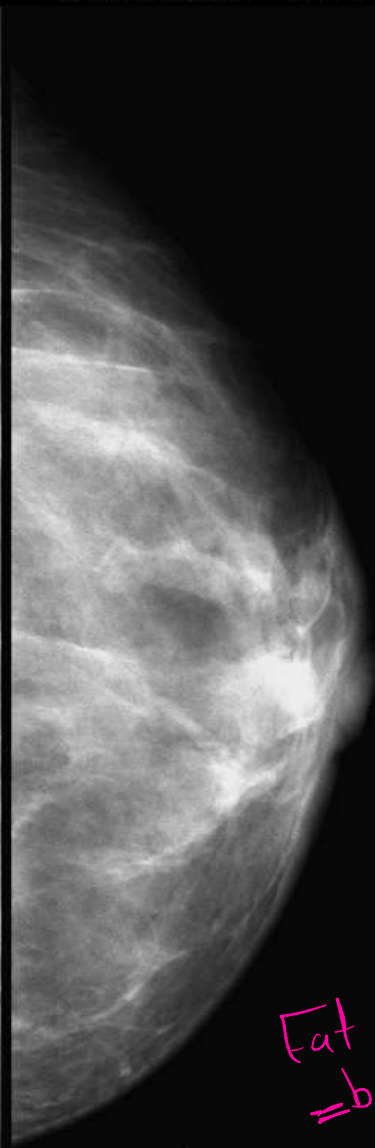
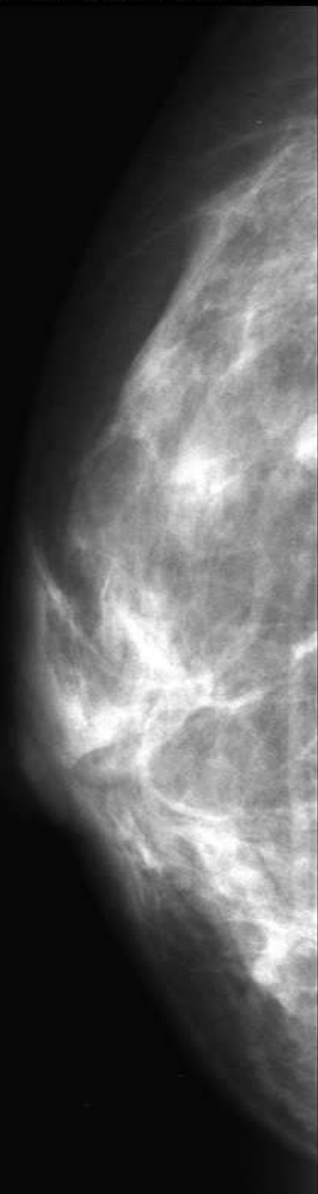
* لازم يكون المريض موقع
موافقة امتياط عشان
لو صار rupture .

Fig. 3. MLO-L, implant-displaced

Fig. 4. MLO-R, implant-displaced

Fig. 1. CC-L, implant-displaced

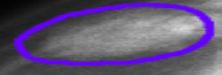
Fig. 2. CC-R, implant-displaced



Fat = 15w/
=benign

غالباً
استخدام
(نفسه)

xccl ✓





Case

37 year old with palpable retroareolar right breast mass

Fig. 1. CC-L

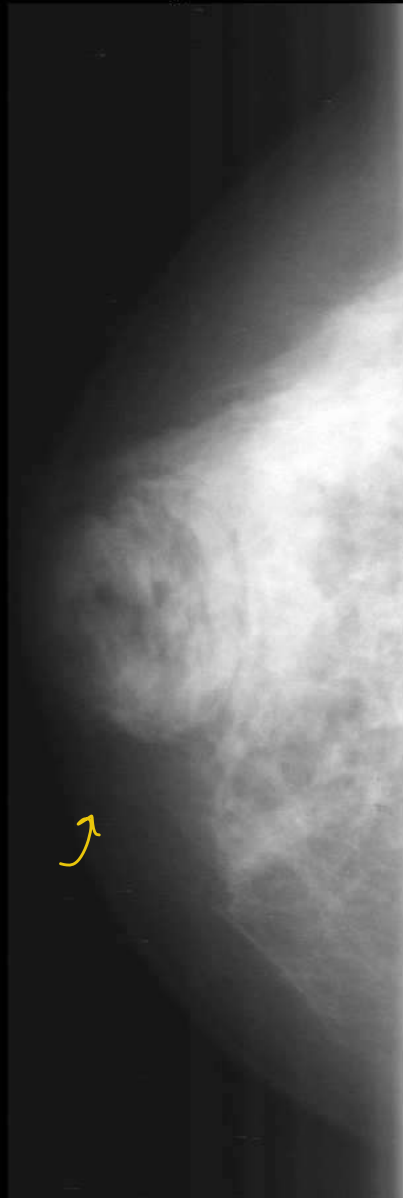


Fig. 2. CC-R

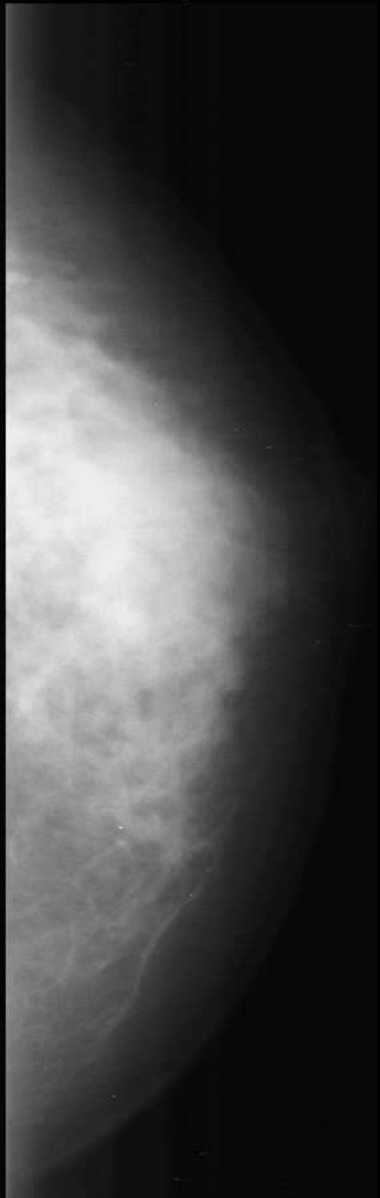


Fig. 3. MLO-L

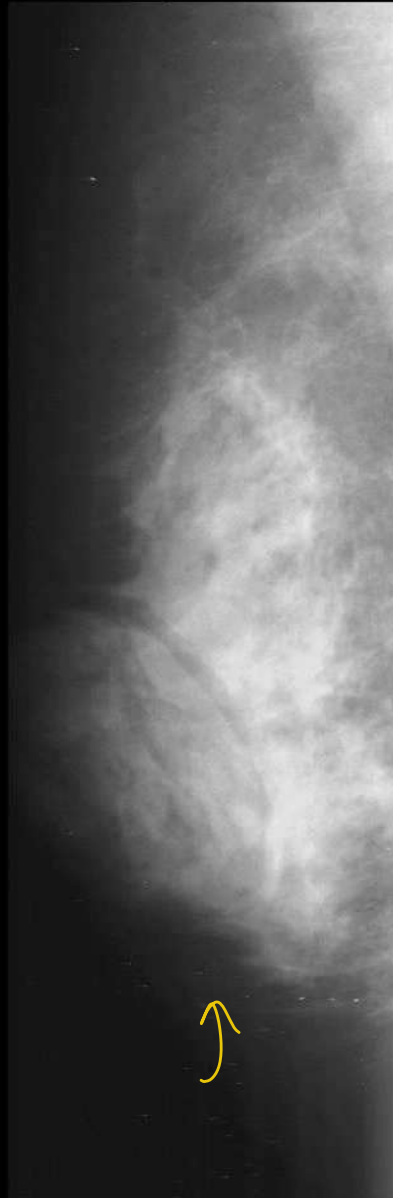


Fig. 4. MLO-R



Fig. 5. Spot compression-L

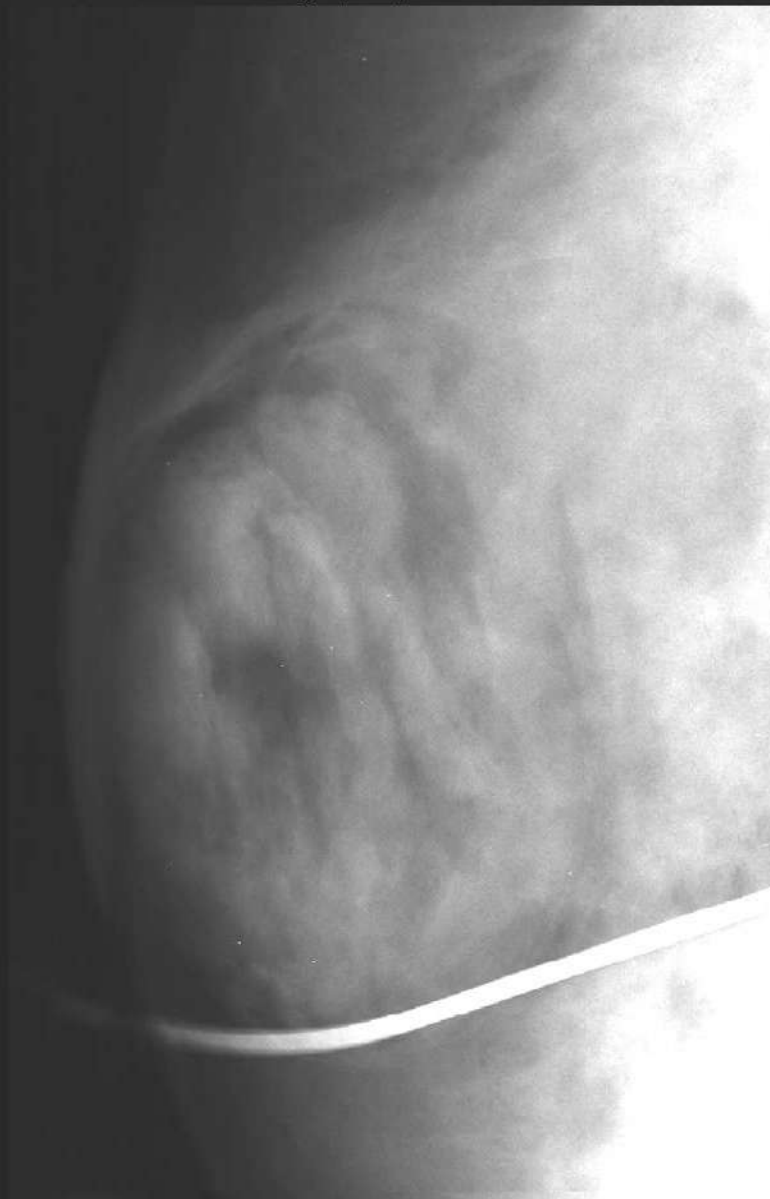
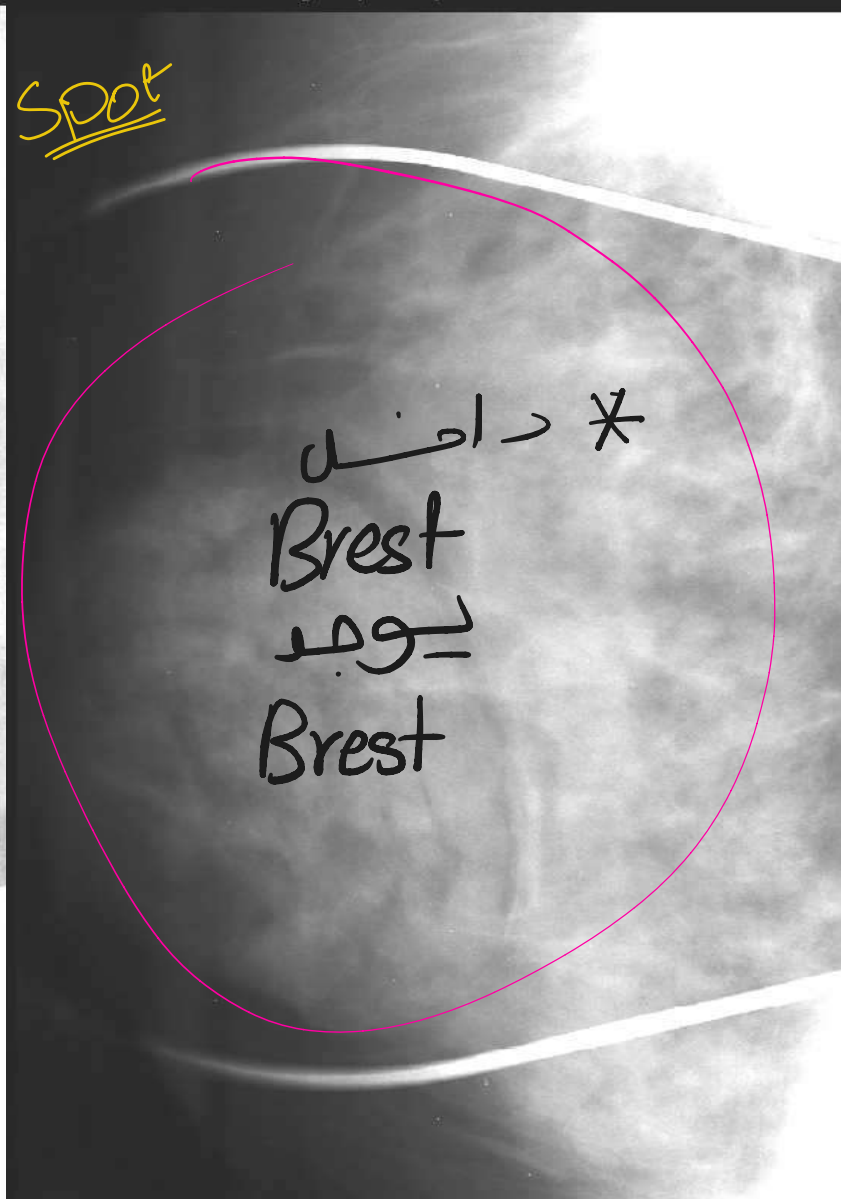


Fig. 6. Spot compression-L





Hamartoma

Lipofibroadenoma

Fibroadenolipoma

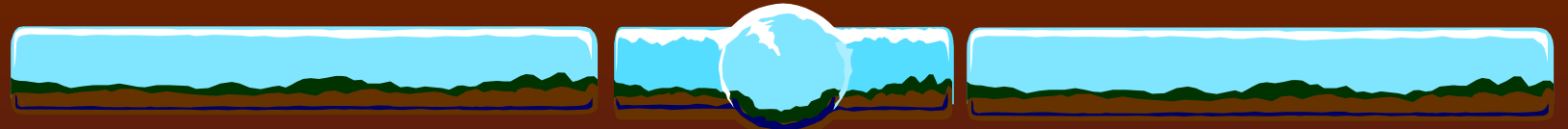
Breast within breast

BIRADS

2

↓

Benign.



Case

60 year old with thickening of left breast

Fig. 1. CC-L

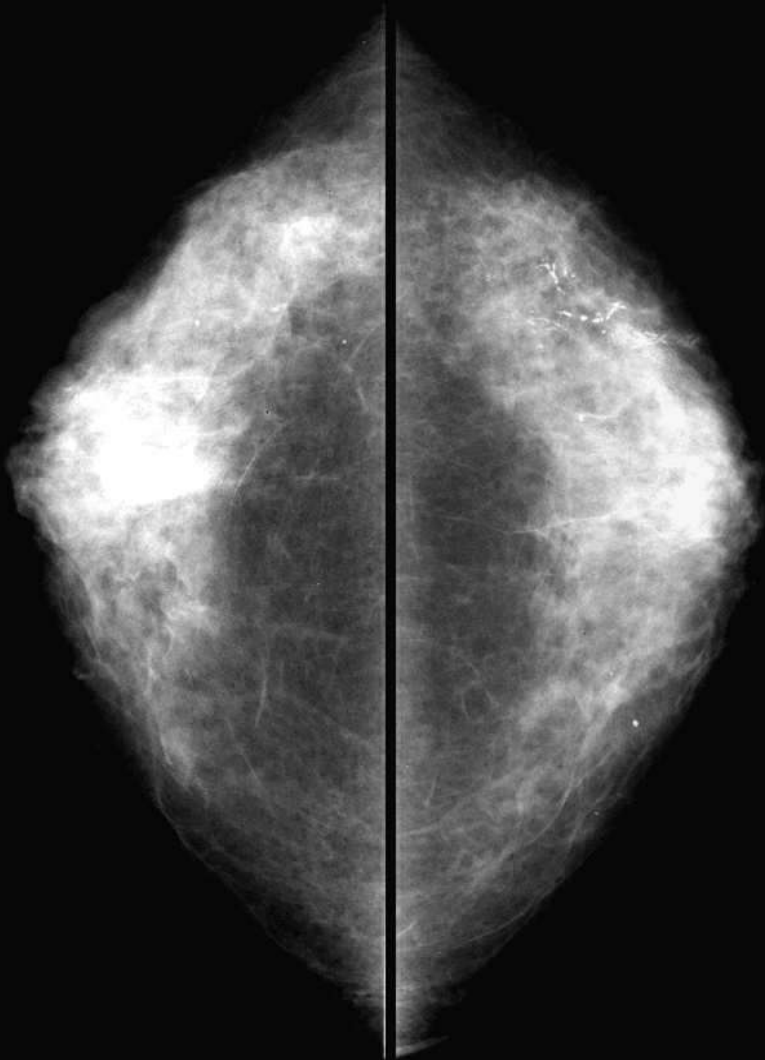


Fig. 2. CC-R

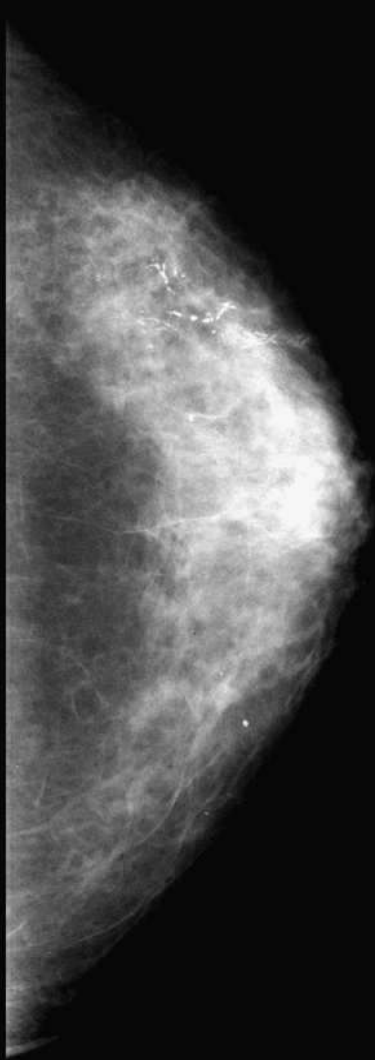


Fig. 3. MLO-L

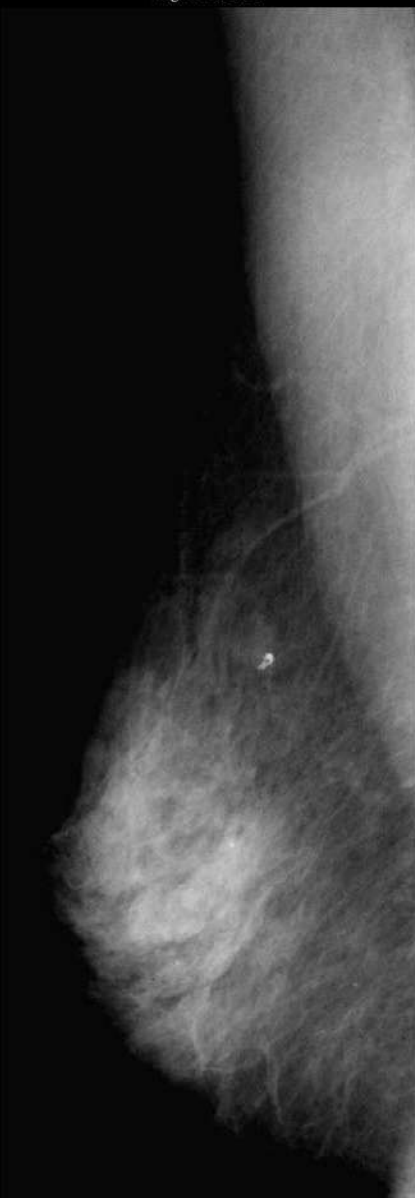
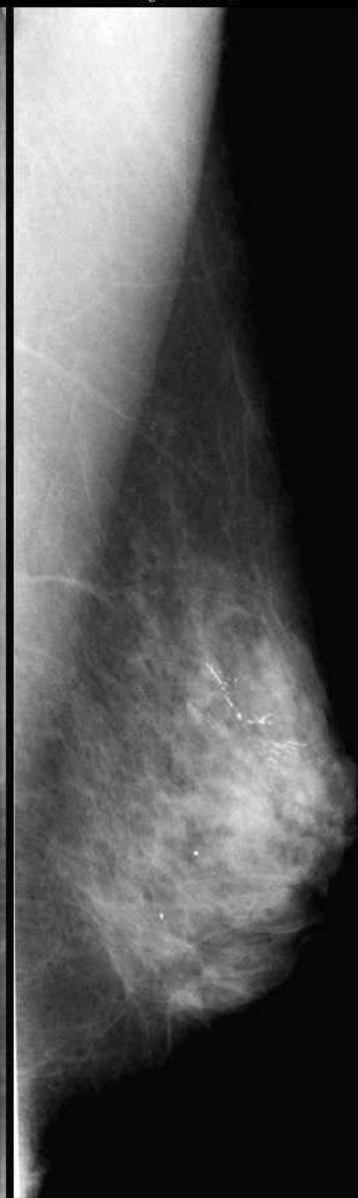
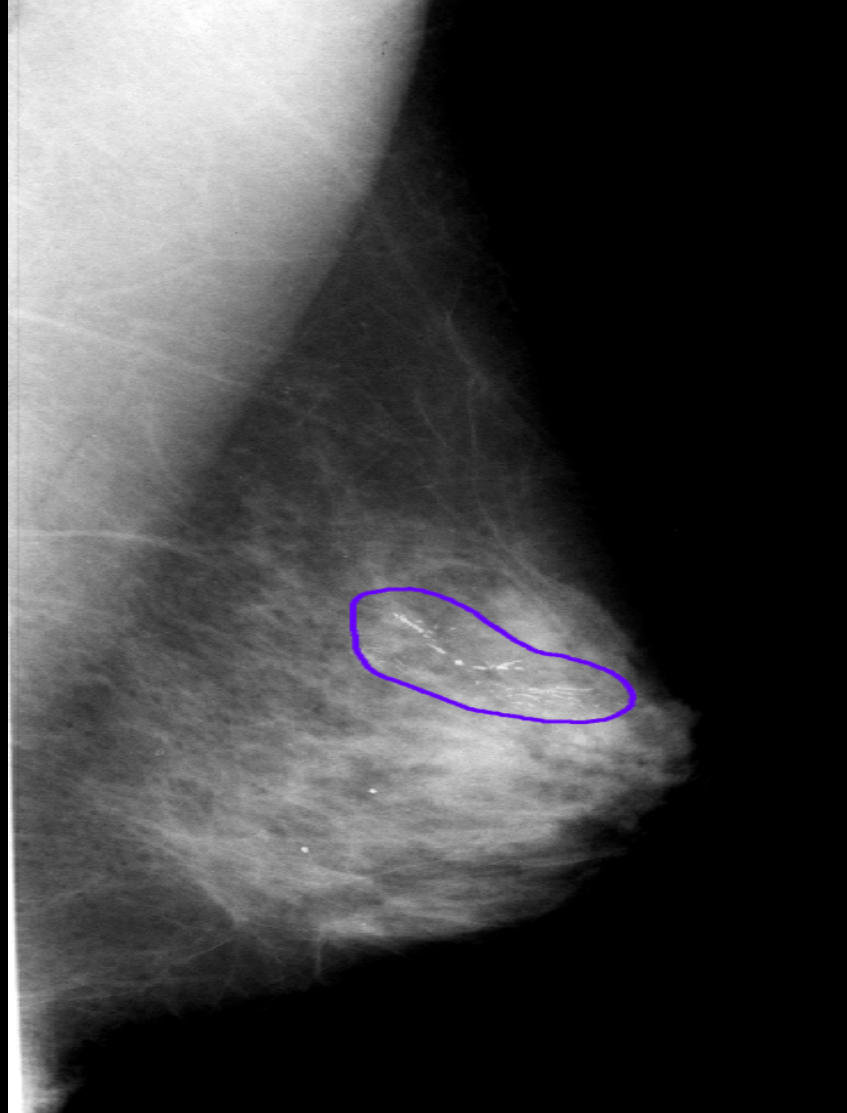
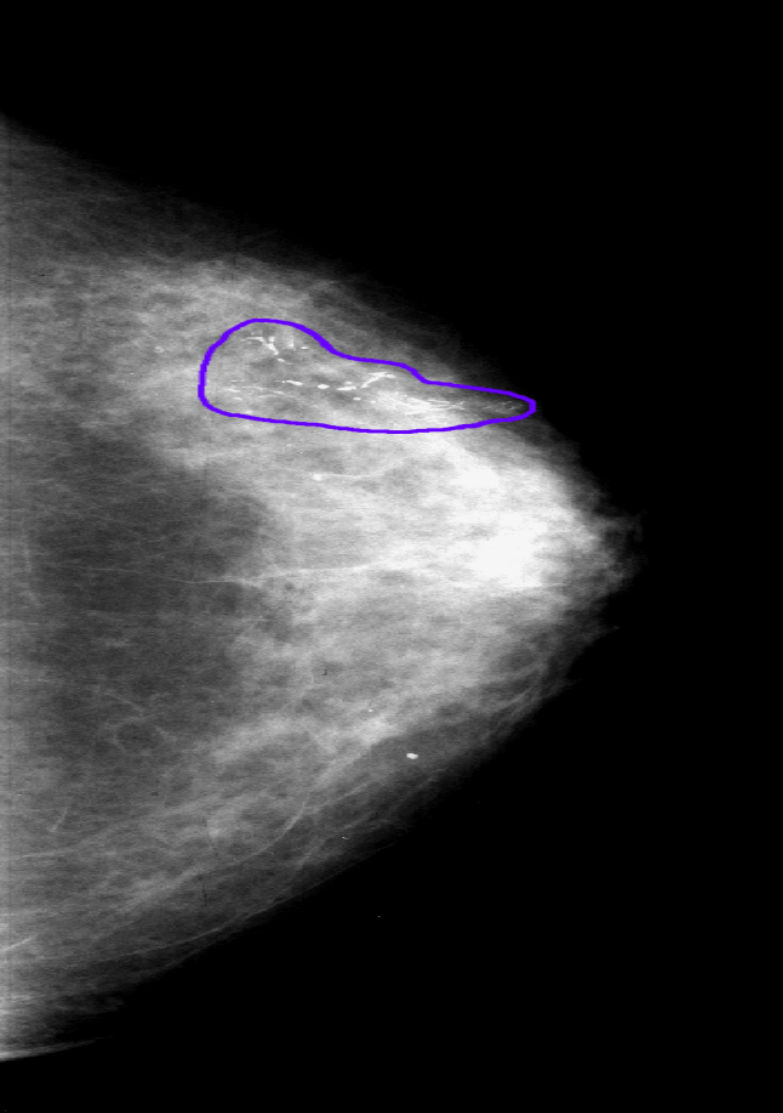


Fig. 4. MLO-R





Next step $\rightarrow$ spot

Fig. 5. Spot compression-R

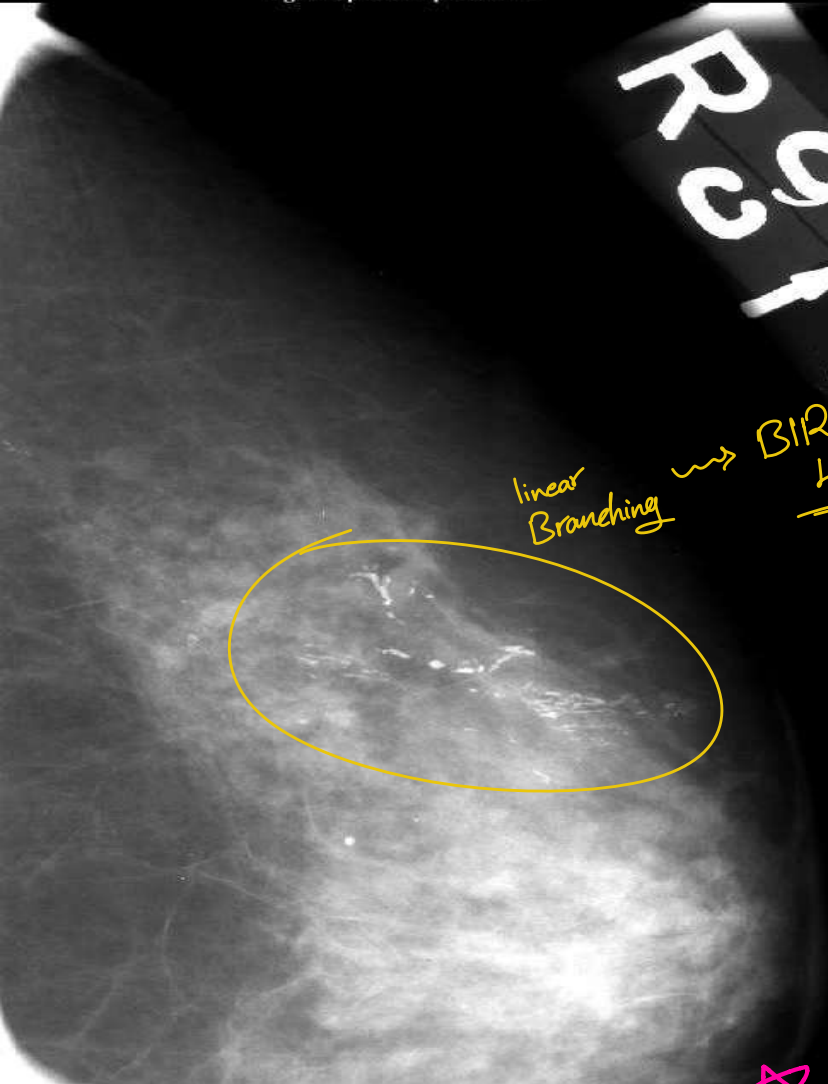
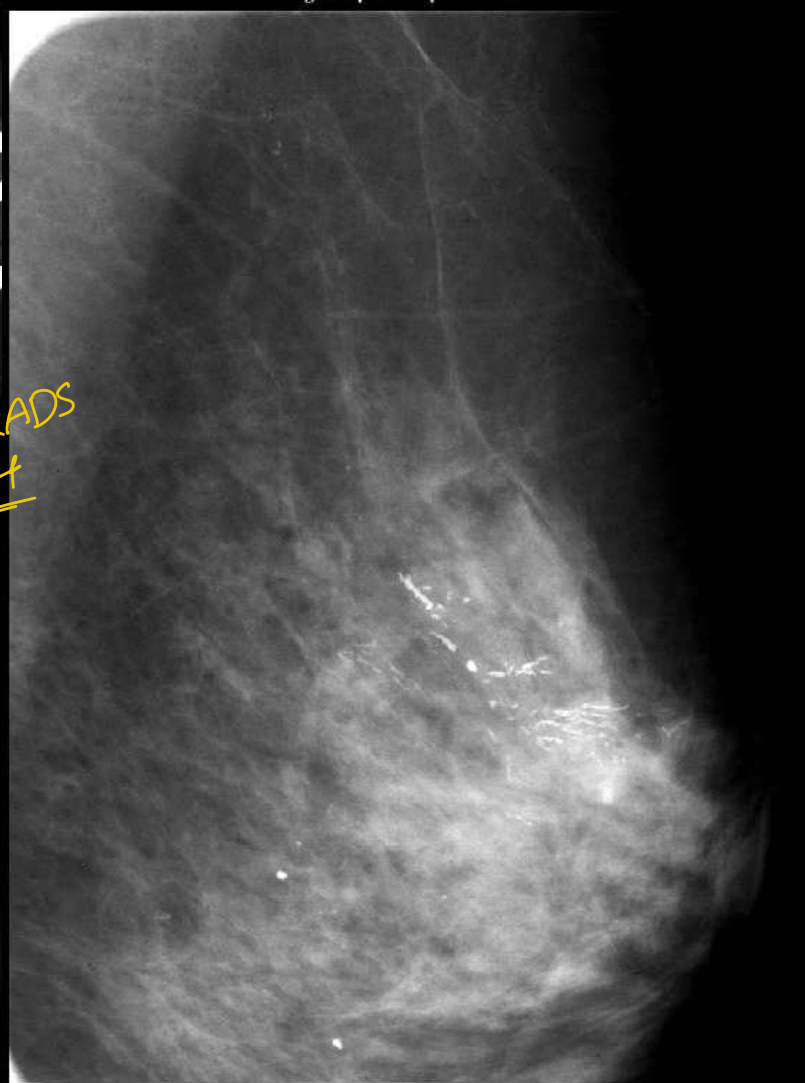


Fig. 6. Spot compression-R



☆
Spot compression



Diagnosis



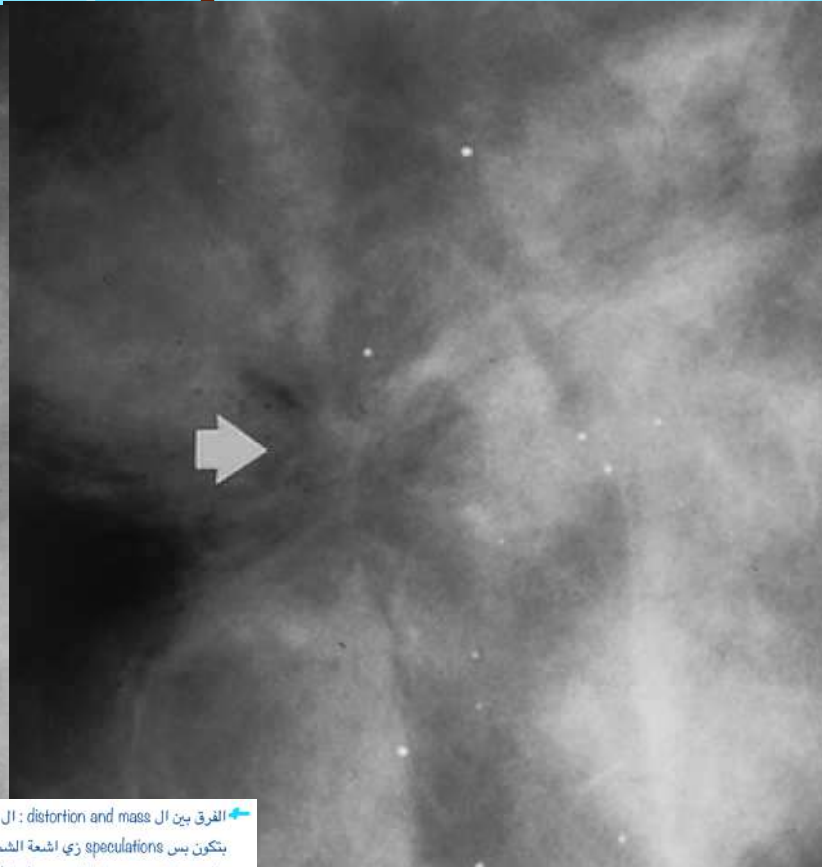
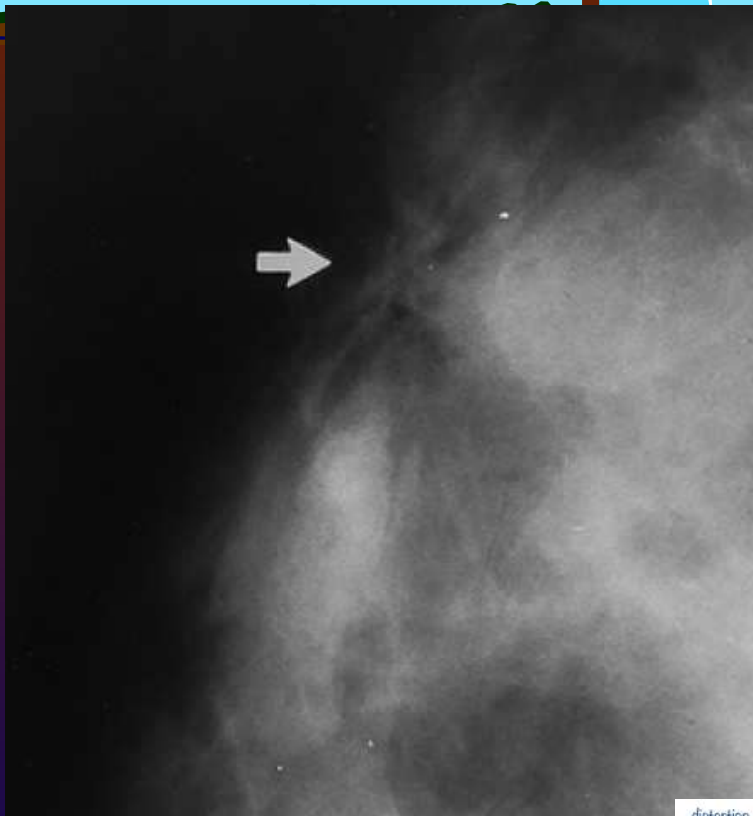
DCIS

Linear branching calcification



Case

50 year old female with breast tenderness for
annual mammogram



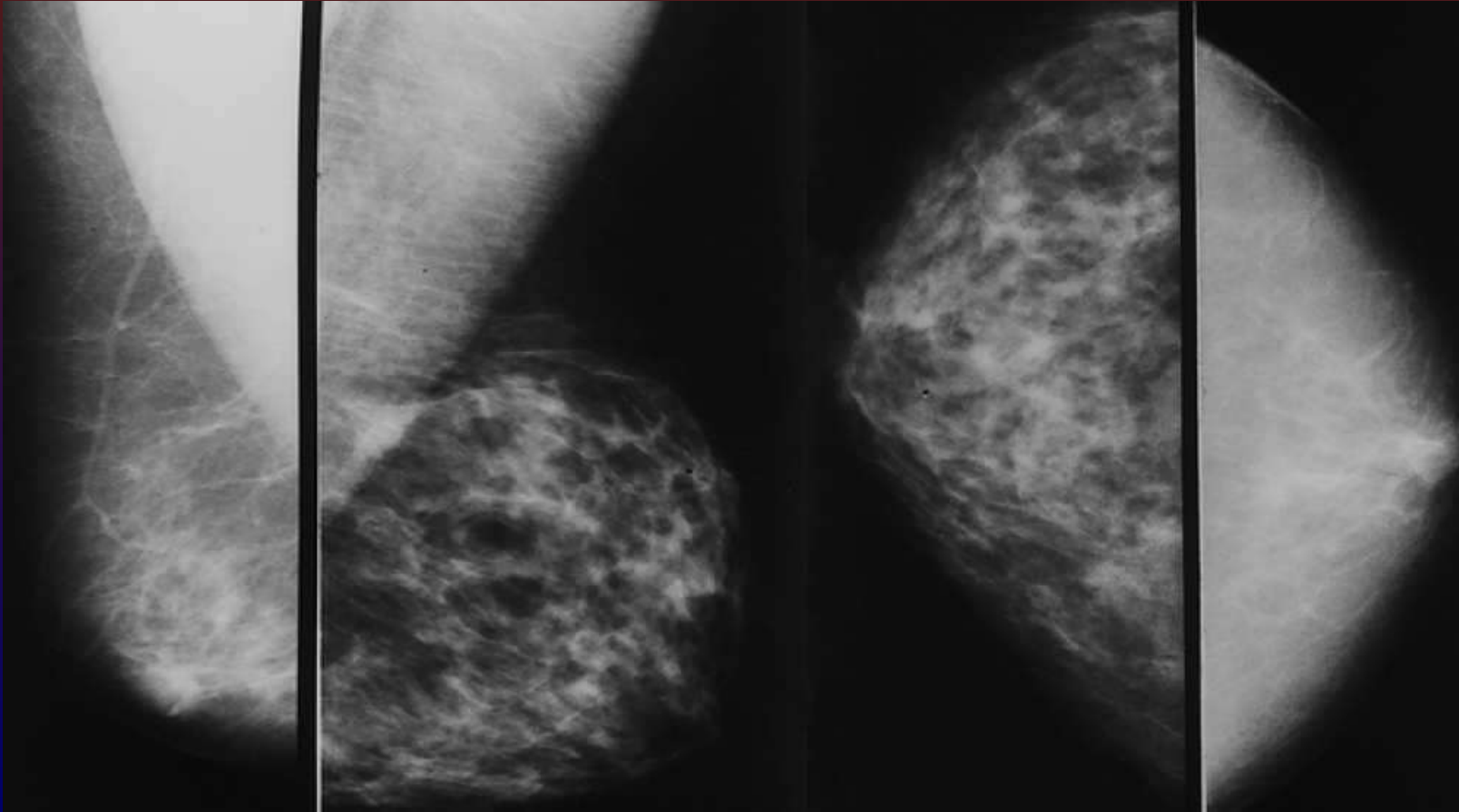
← الفرق بين ال distortion and mass : ال distortion
 يتكون من speculations زي اشعة الشمس من
 بالنص ما في mass اما ال speculated mass في
 mass بالنص لونها ابيض و ظالع منها speculations

Architectural distortion

تفوق على mass
 صافي dens



TWO DIFFERENT PATIENTS





Asymmetry of breast tissue in Density

Asymmetrical breasts due to edema , ILC , surgery , mastitis
radiotherapy or lymphatic obstruction

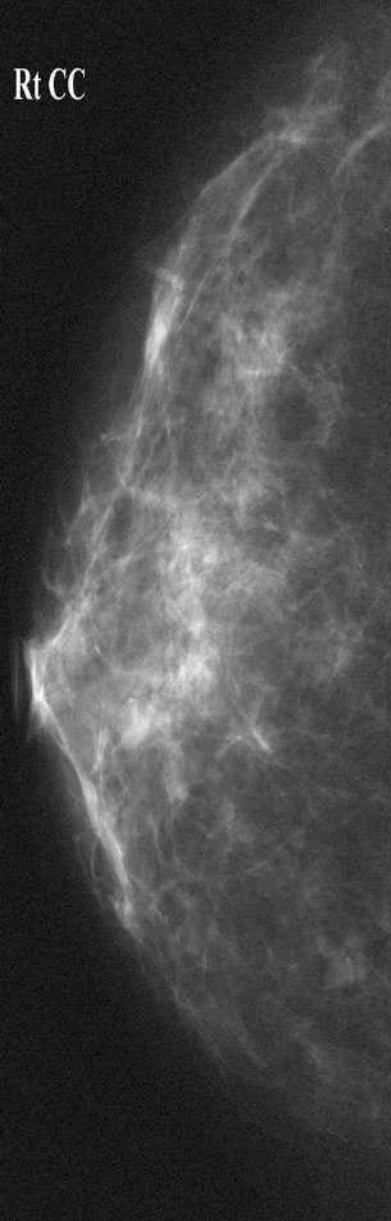
↪ Invasive lobular carcinoma



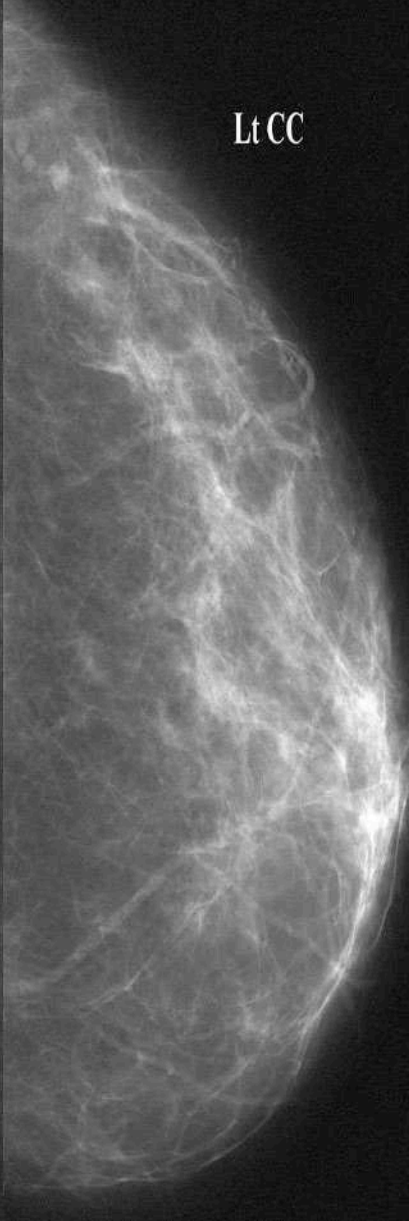
Case

42 year old with bloody nipple discharge of the right breast.

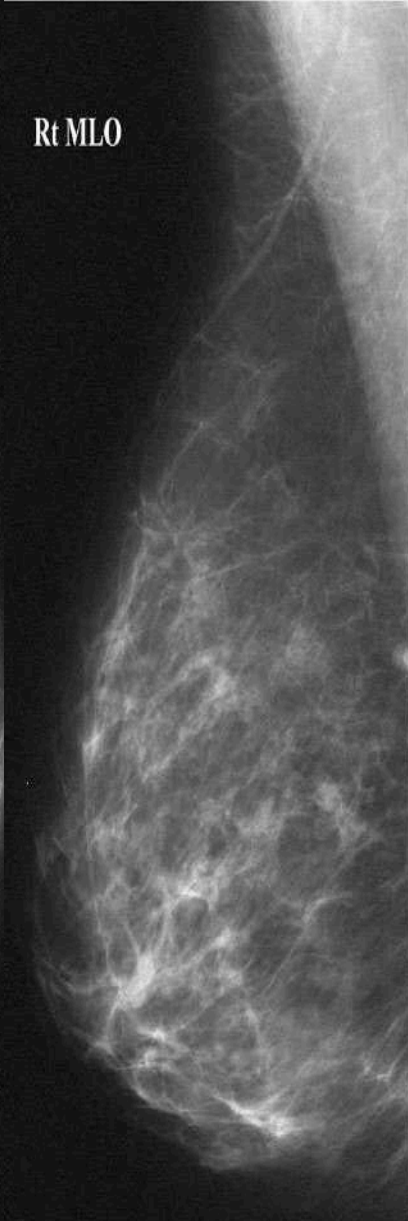
Rt CC



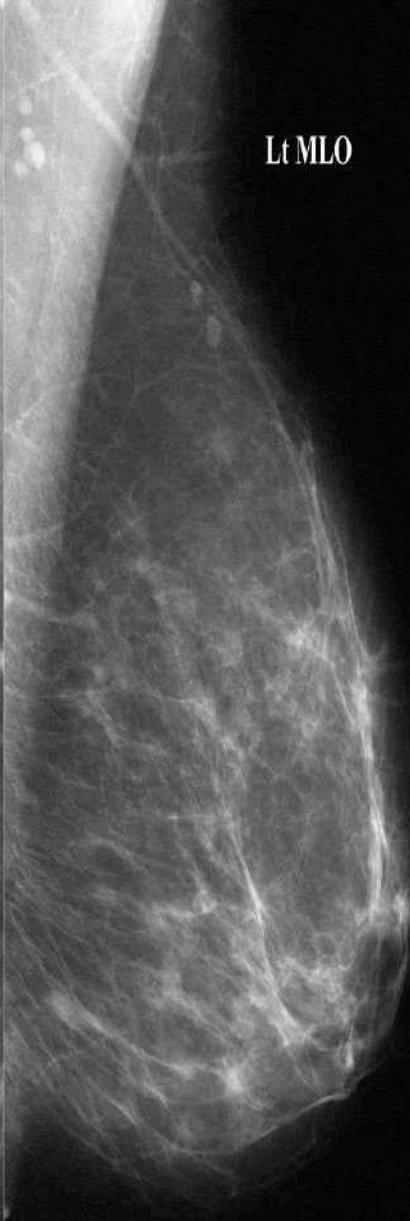
Lt CC



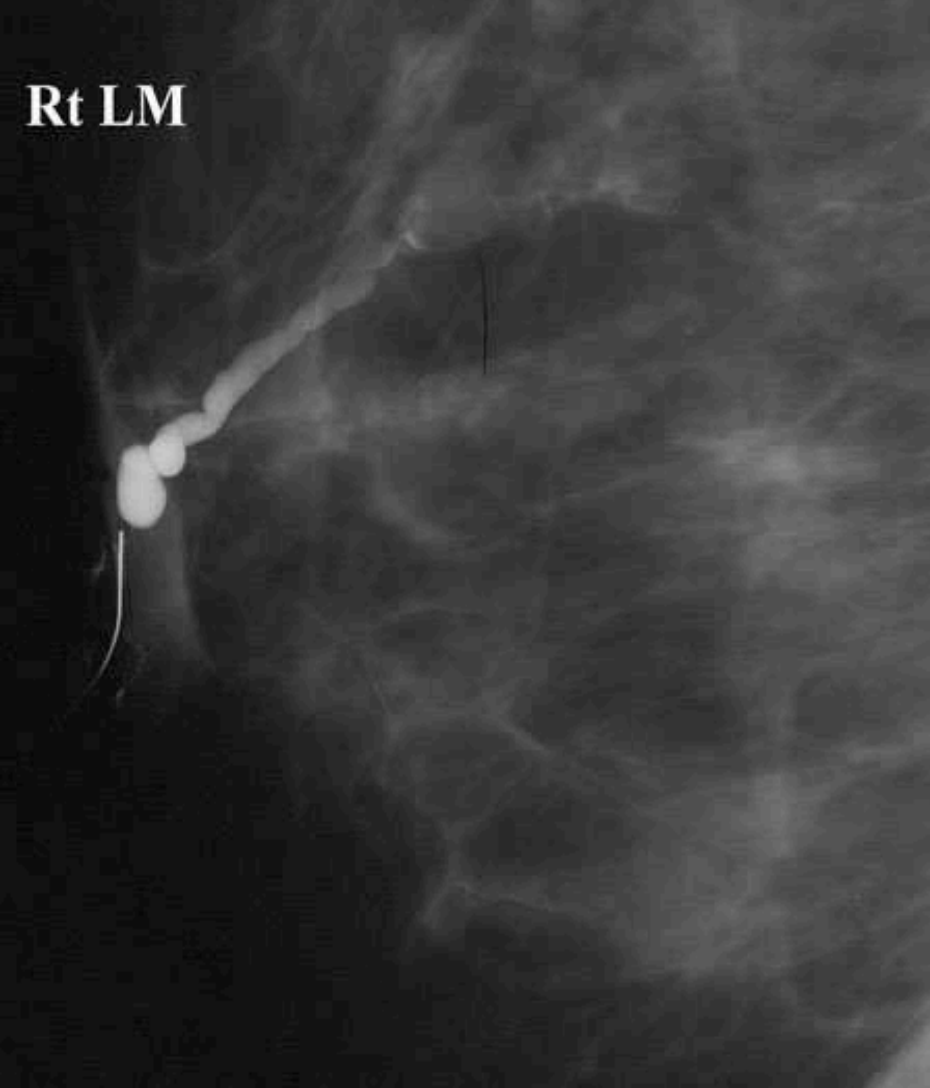
Rt MLO



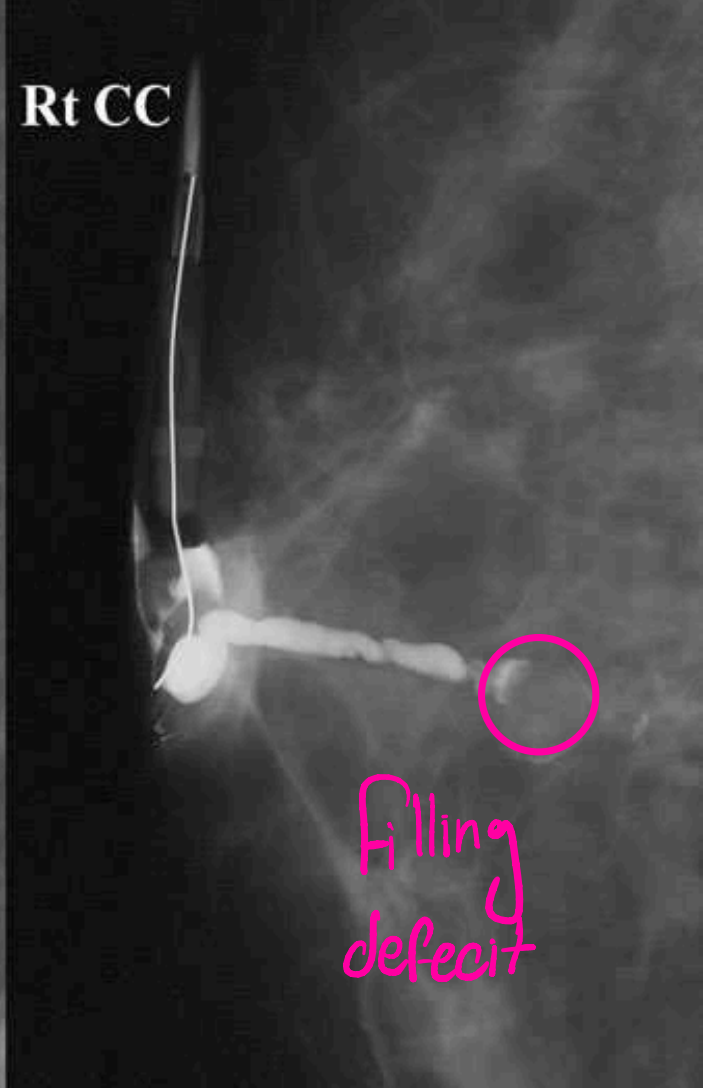
Lt MLO



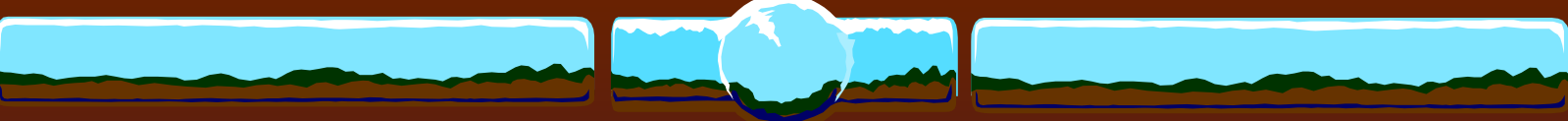
Rt LM



Rt CC



Ductogram



* using Non-Ionized contrast

- Ductogram is used for nipple discharge .it showed filling defect within the duct.
- on U/s circumscribed mass within a prominent duct .

lap 4
70dB/C 3
ersist Med
D Opt:Gen
r Rate:High
W 0 Pg 0
ol 0 Pg 0



UWMC ROOSEVELT L12-5 38 SmPrt/Brst

lap 4
70dB/C 3
ersist Med
D Opt:Gen
r Rate:High
W 0 Pg 0
ol 0 Pg 0



NO FLOW

lap 4
70dB/C 3
ersist Med
D Opt:Gen
r Rate:High
W 0 Pg 0
ol 0 Pg 0



UWMC ROOSEVELT L12-5 38 SmPrt/Brst

lap 4
70dB/C 3
ersist Med
D Opt:Gen
r Rate:High
W 0 Pg 0
ol 0 Pg 0

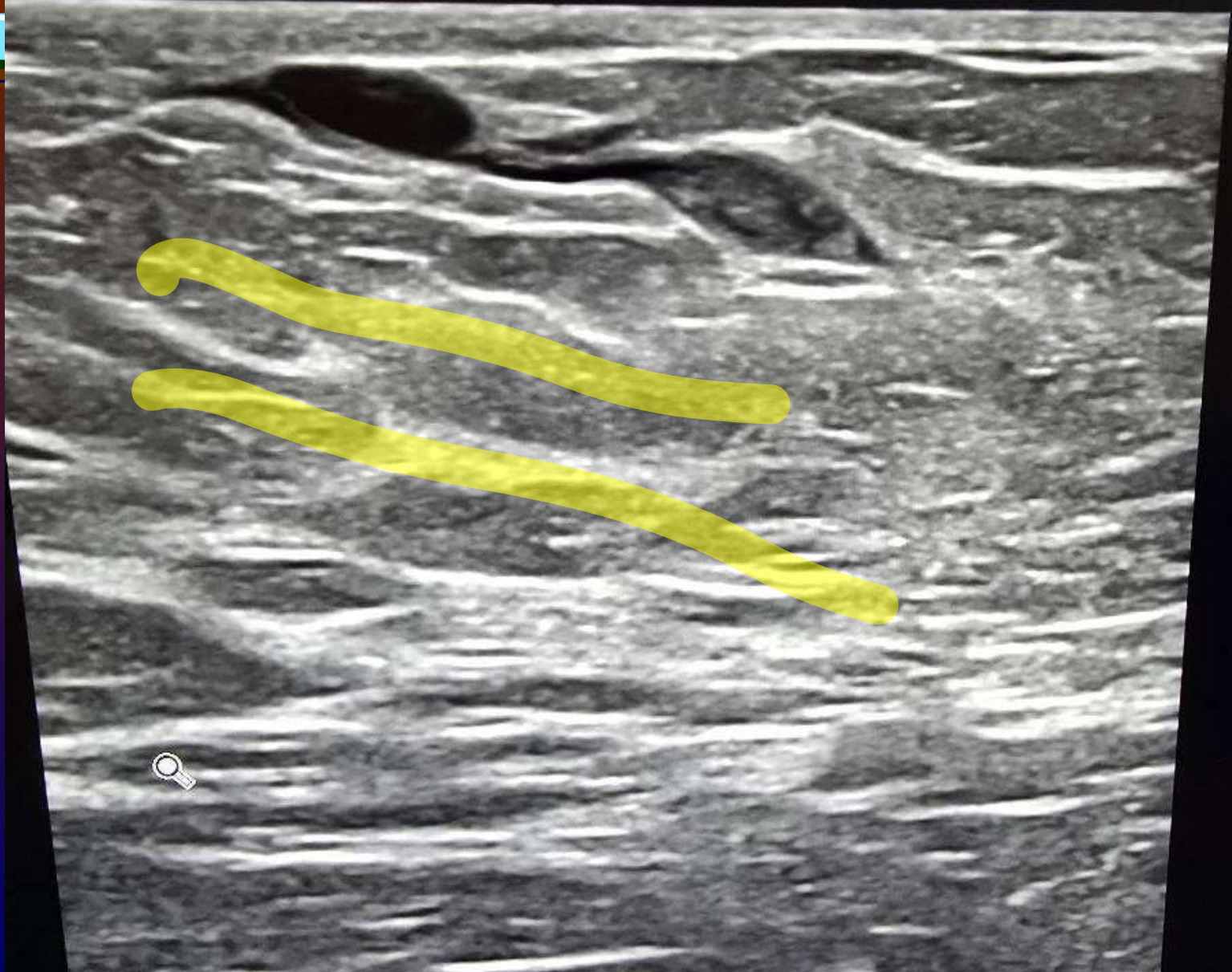


NO FLOW

Ultrasound



Diagnosis





Intraductal Papilloma

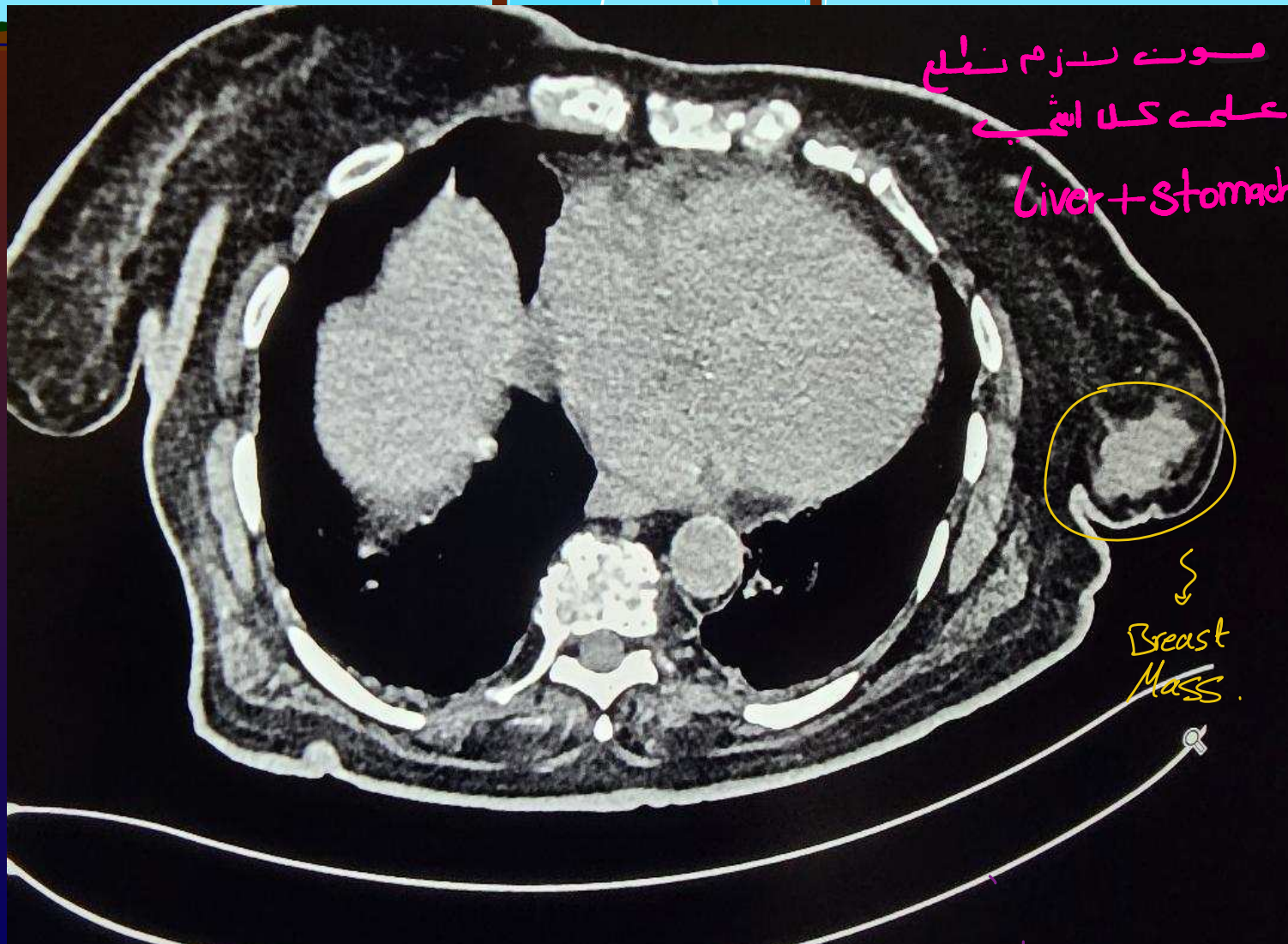
BIRADS 4

Surgical evaluation is needed to exclude diagnosis of cancer.

5% of solitary duct discharges are due to cancer.

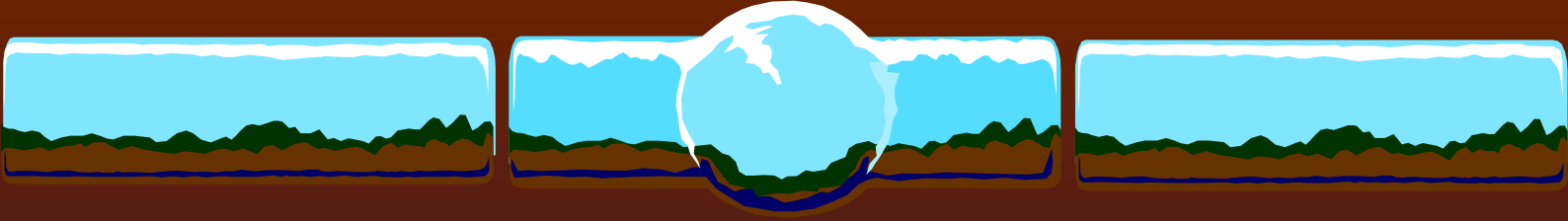
Papilloma most common cause of serous/bloody discharge.

due to
bloody
discharge



موت لازم قطع
علاء کلا اشپ
Liver + stomach

↘
Breast
Mass.



Thank you