



SISTEMA SANITARIO REGIONALE

ASL
LATINA



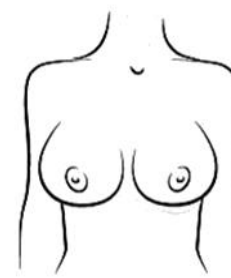
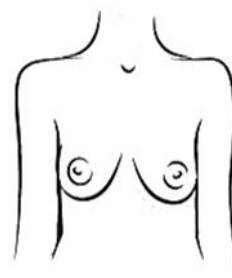
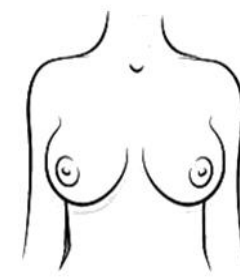
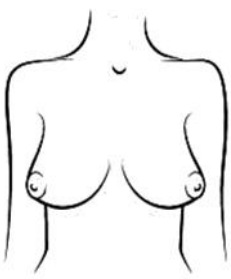
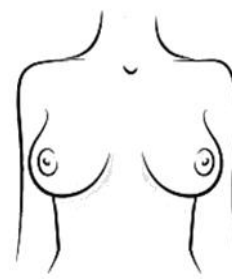
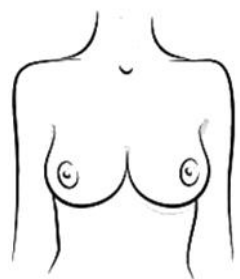
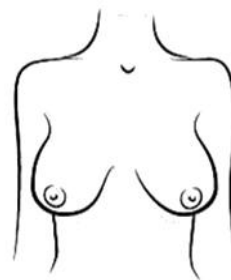
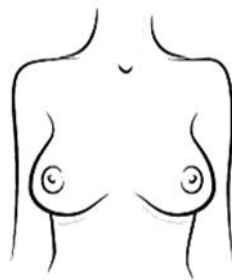
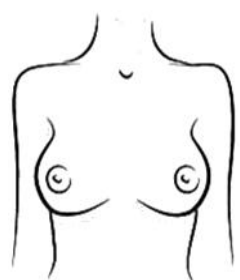
REGIONE
LAZIO

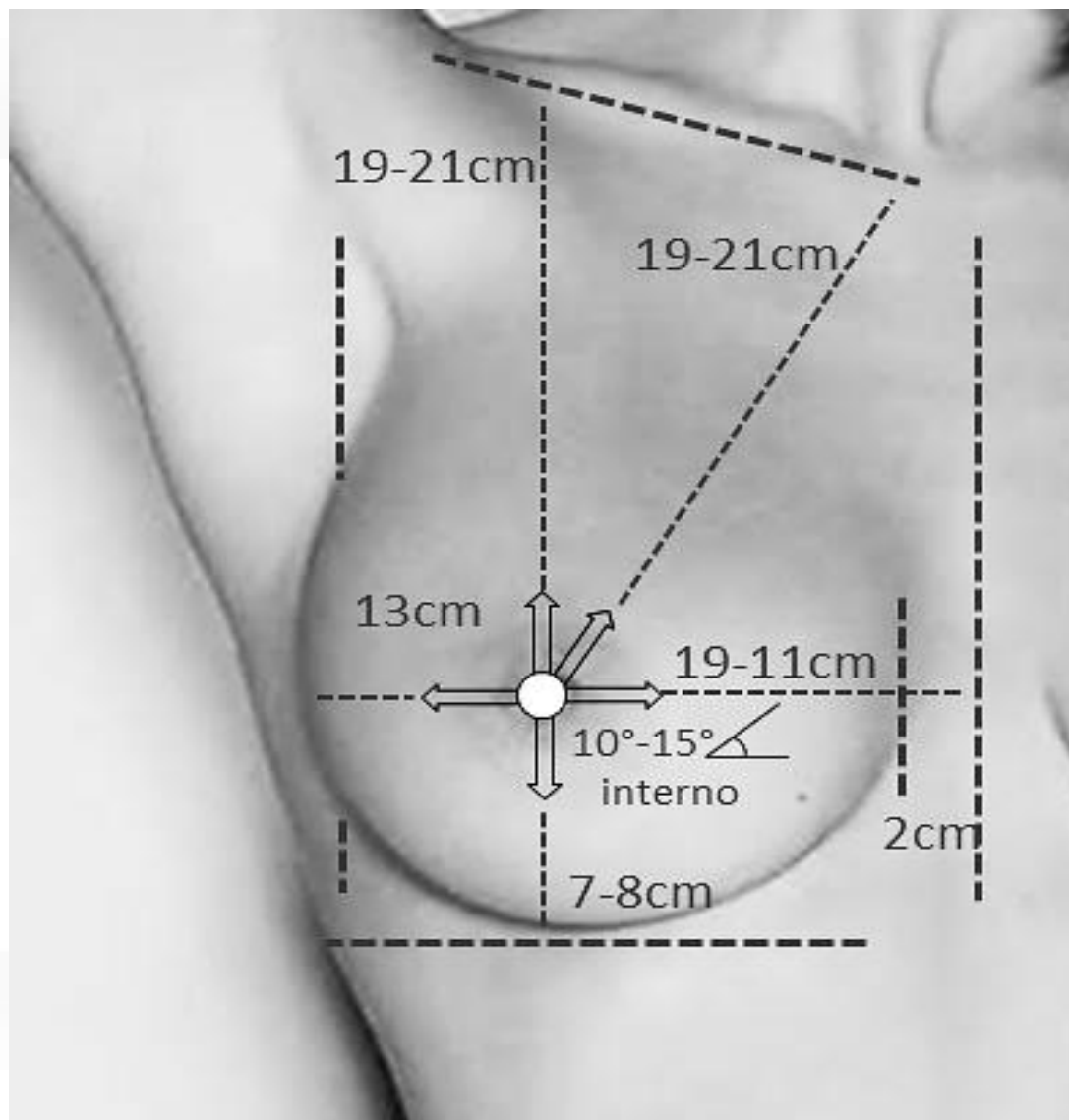
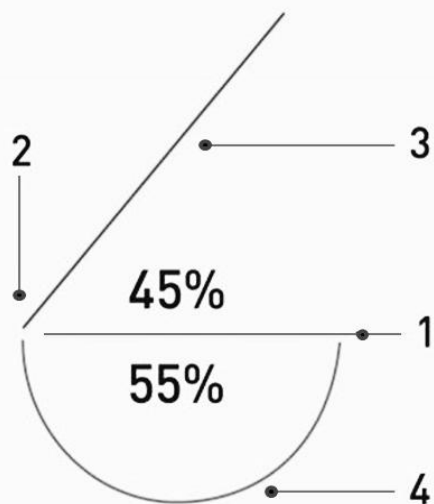
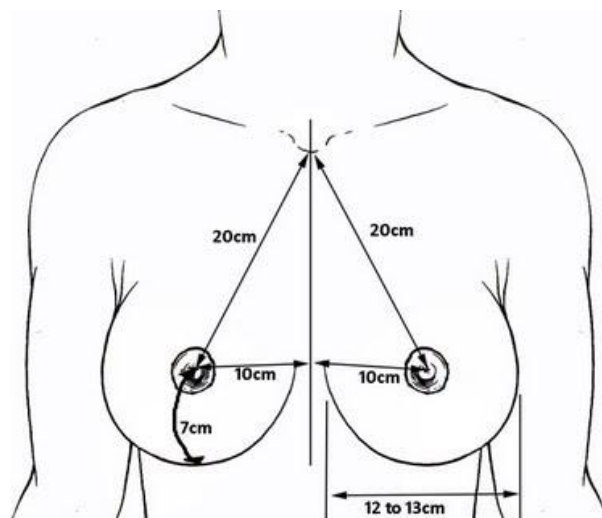
CORSO DI AGGIORNAMENTO PER TSRM DEDICATI
AL PROGRAMMA DI SCREENING MAMMOGRAFICO

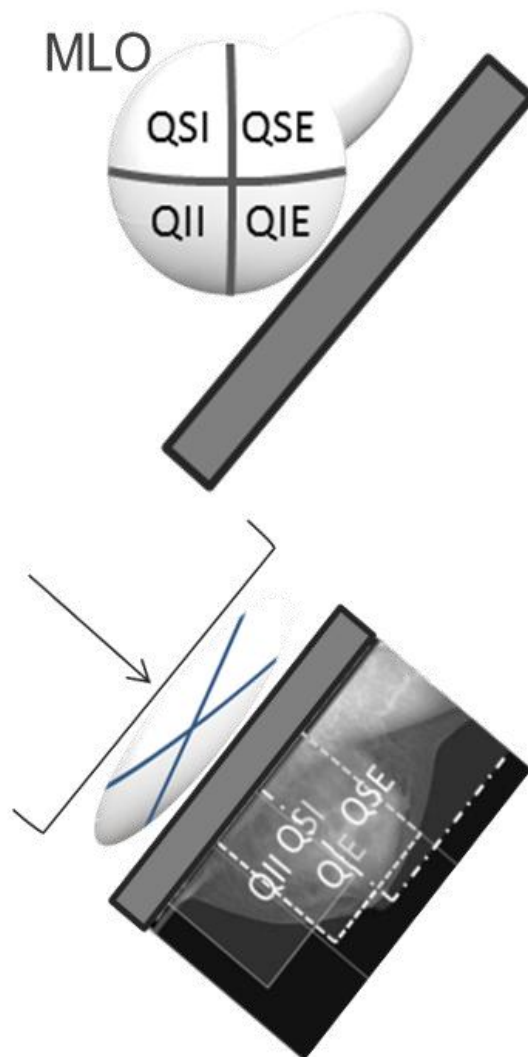
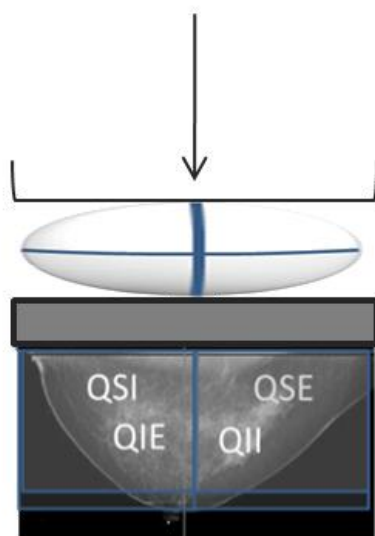
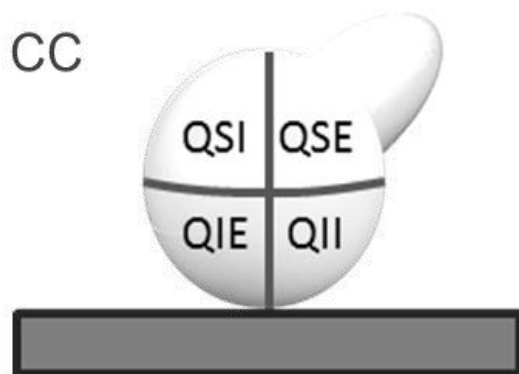
Ospedale "S. Maria Goretti" – Latina, 23 Aprile 2016

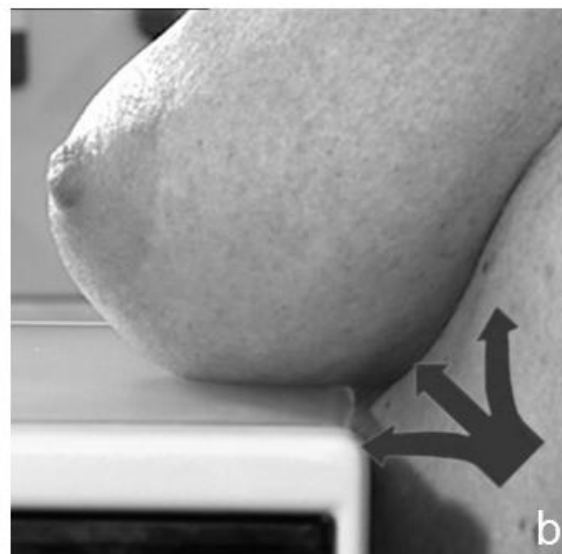
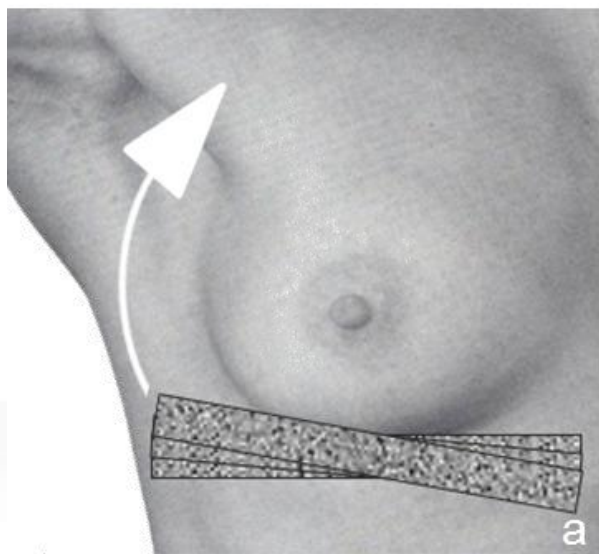
Proiezioni mammografiche

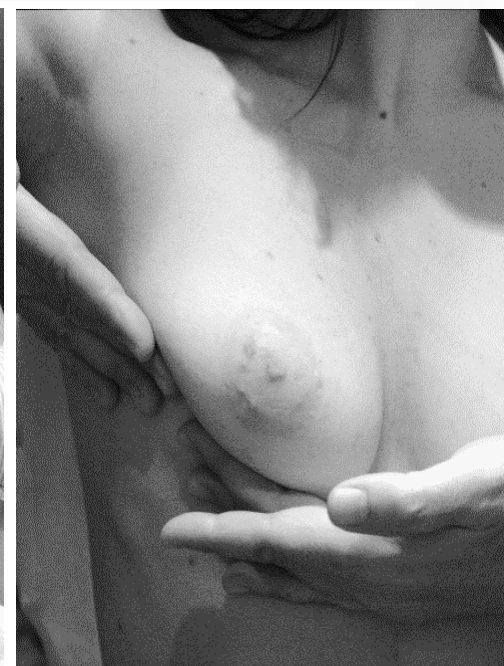
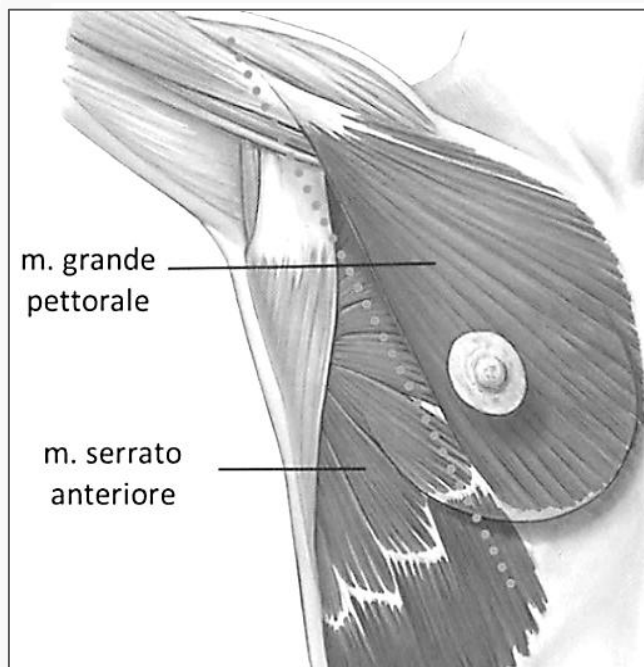
Stefano Pacifici
Unità di Diagnostica Senologica
Ecotomografia medica Srl - Roma

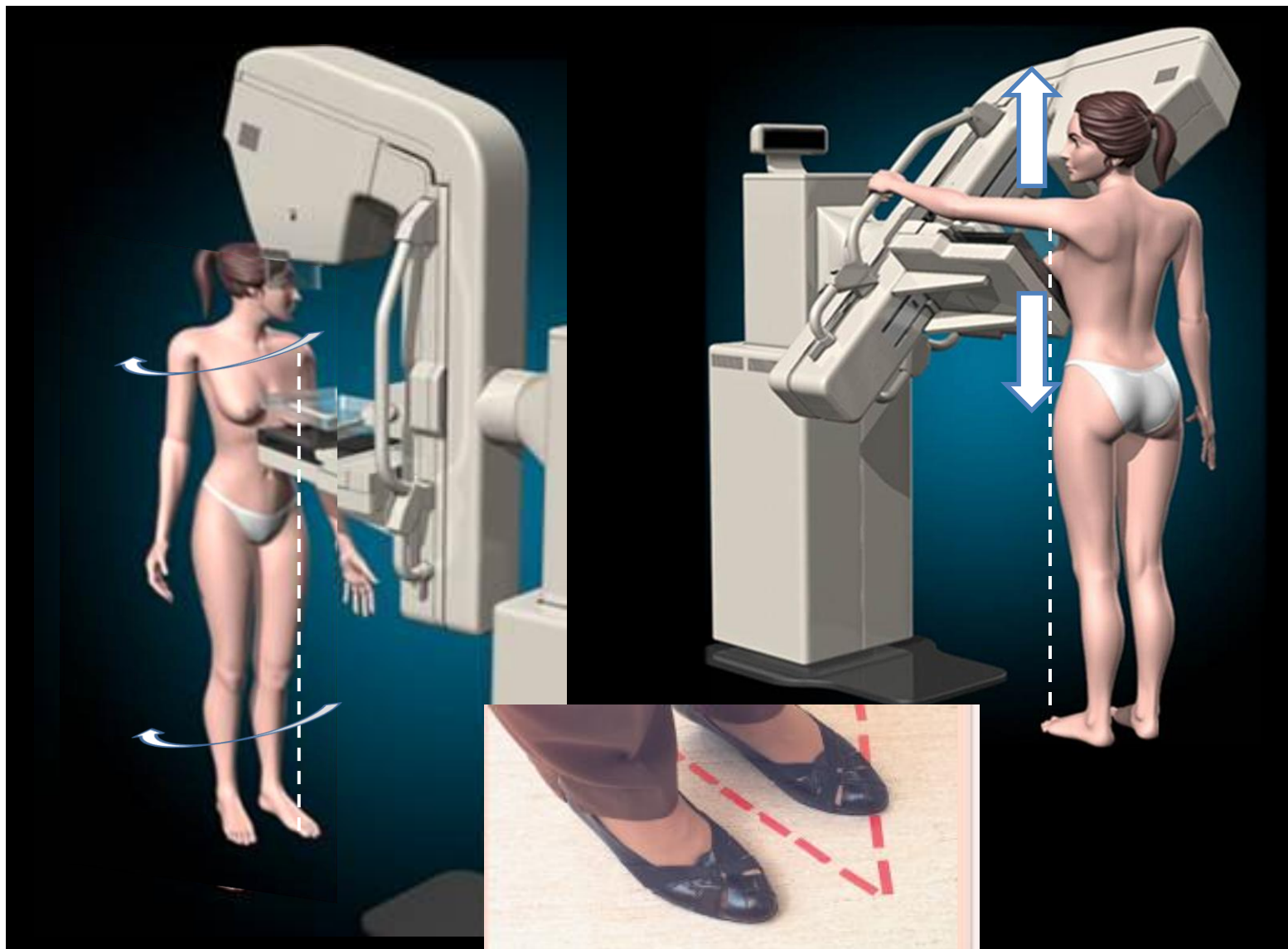








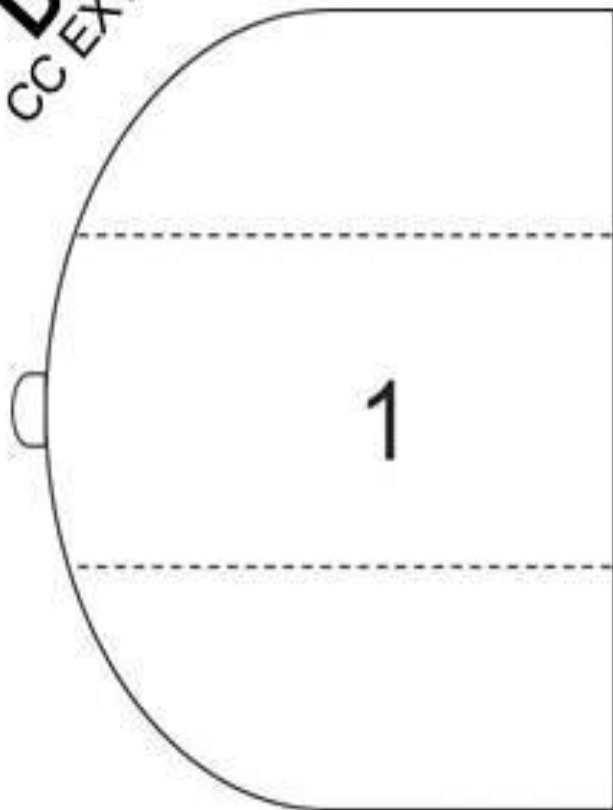




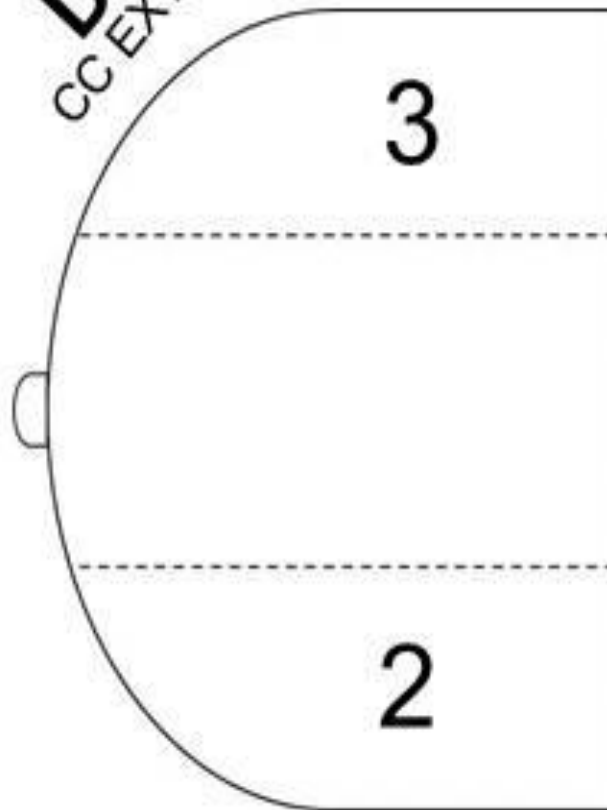


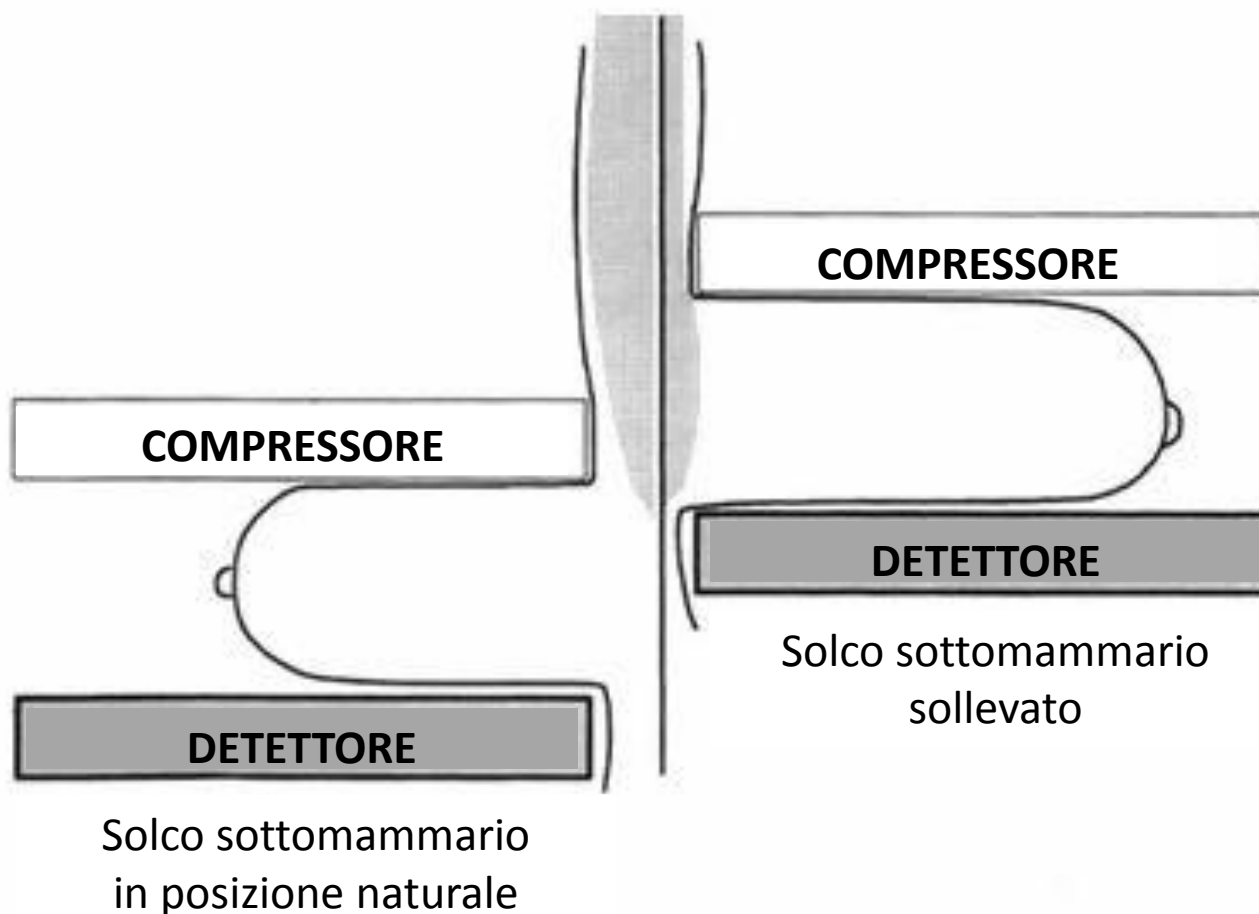
LA PROIEZIONE CRANIO-CAUDALE (CC)

D
CC EXT

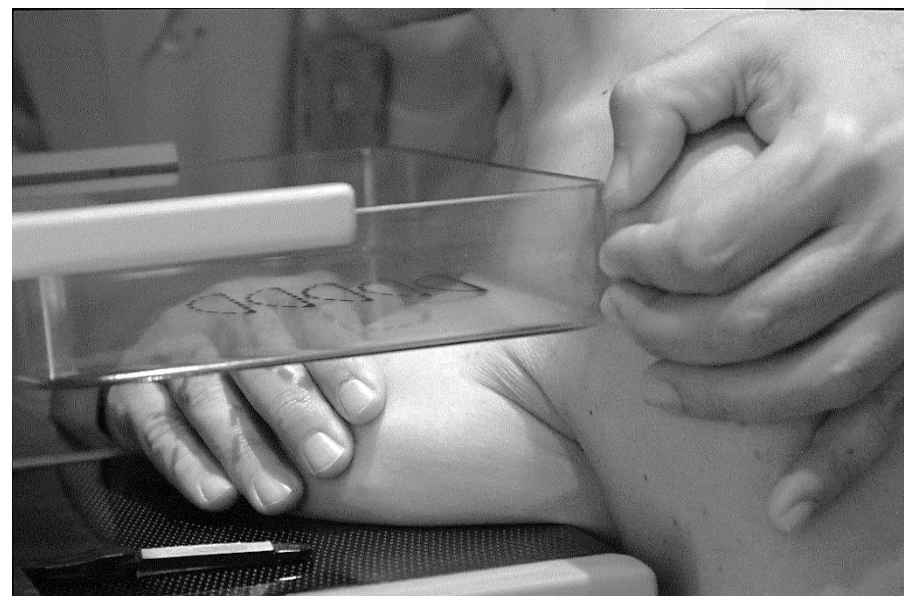
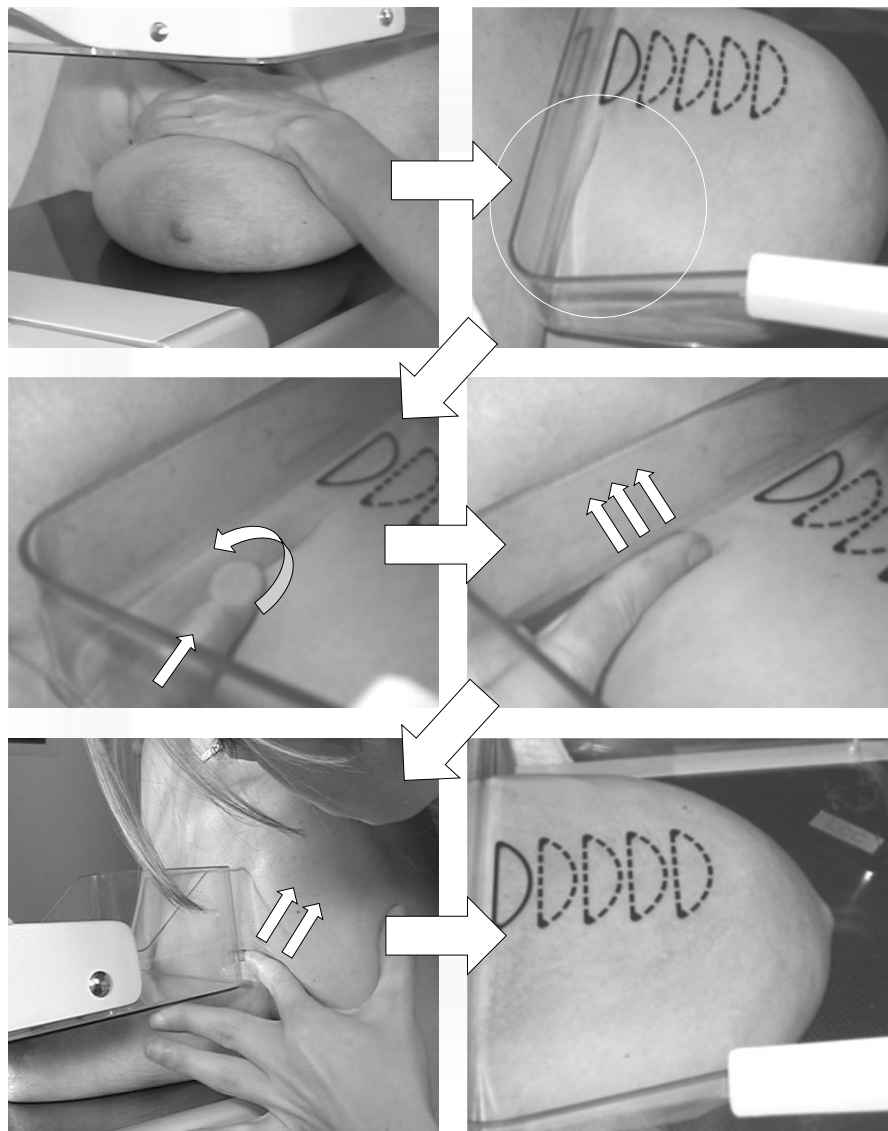


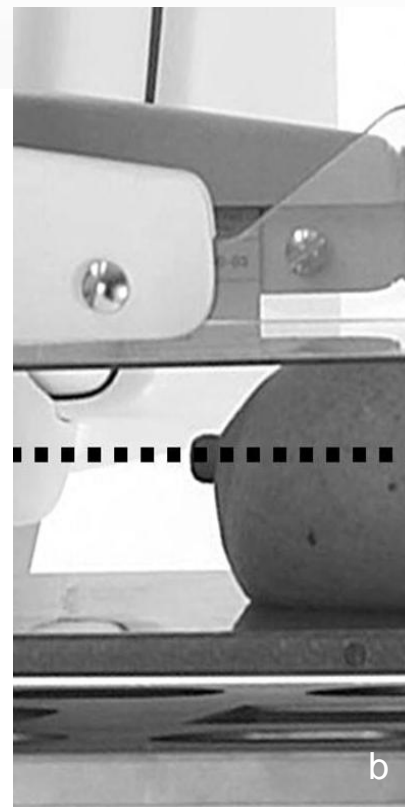
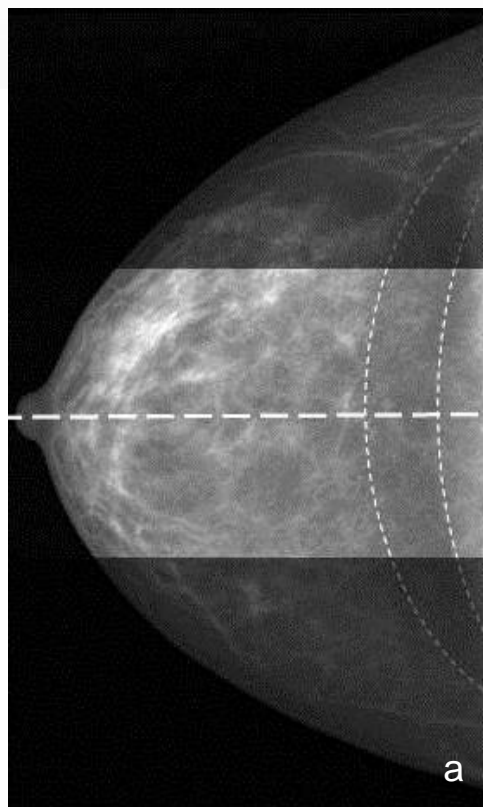
D
CC EXT

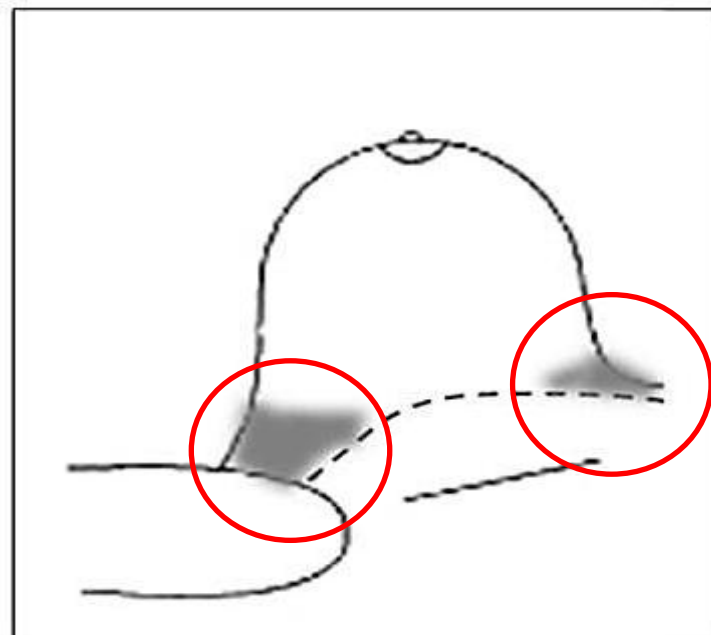
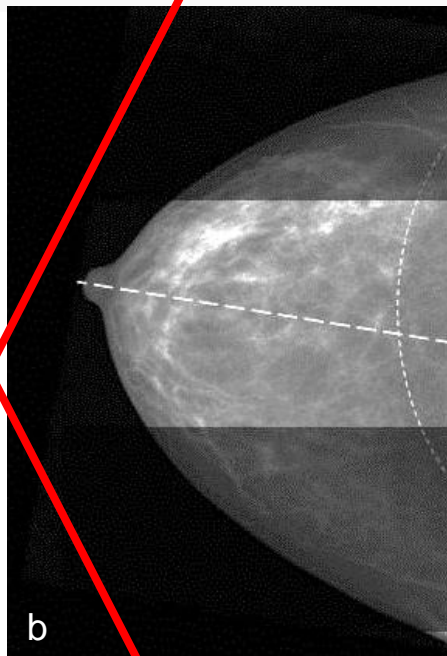
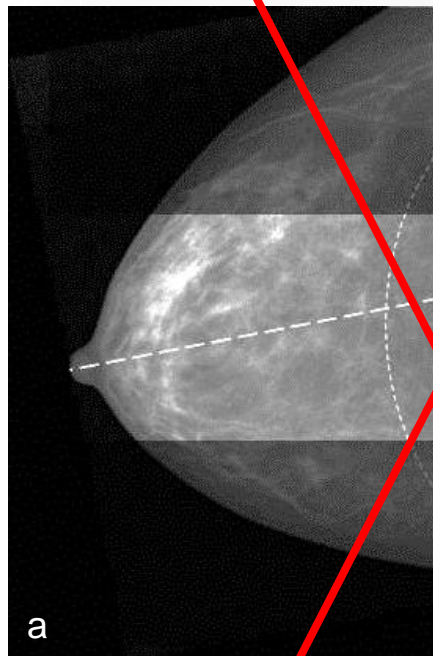


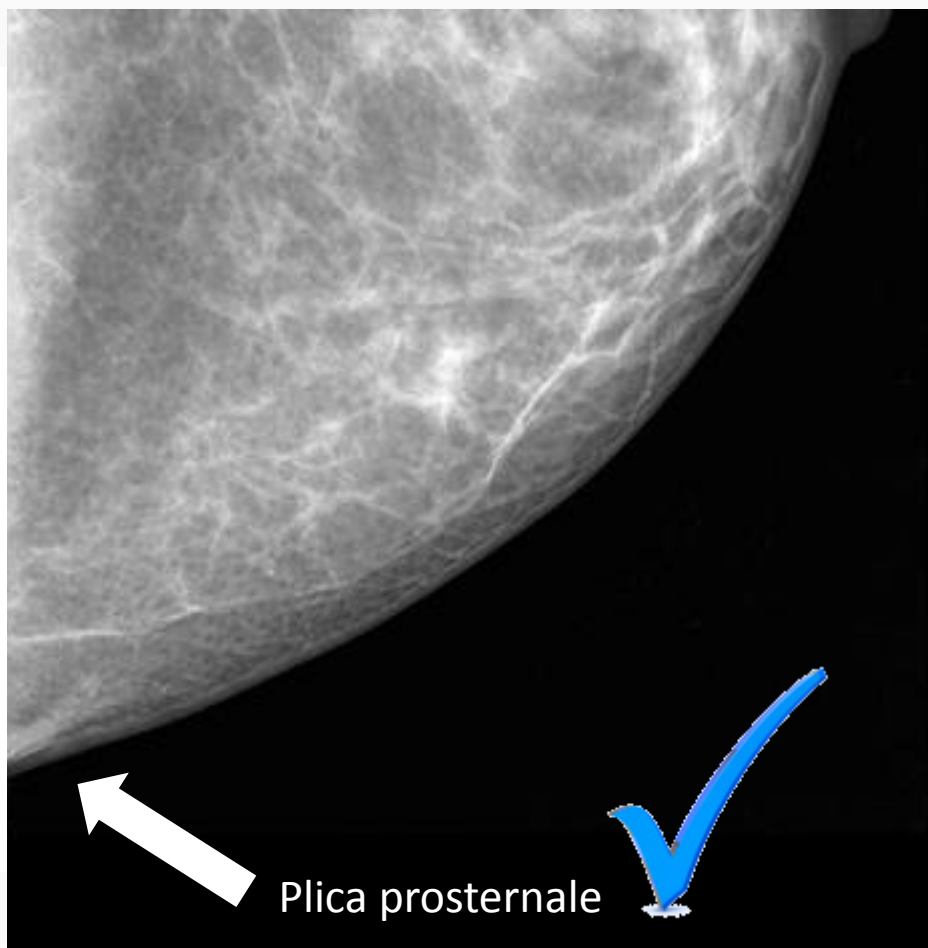


PRIMO SETTORE

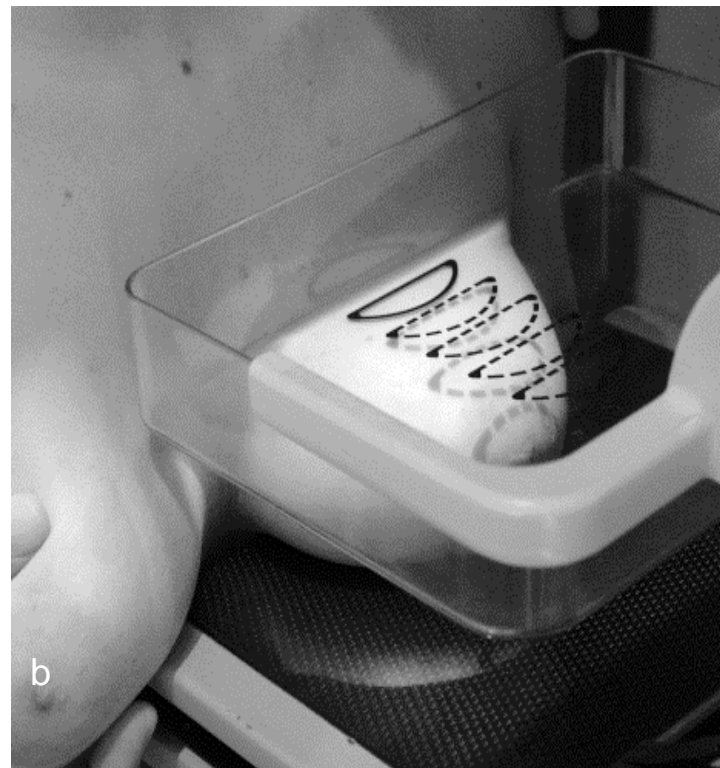






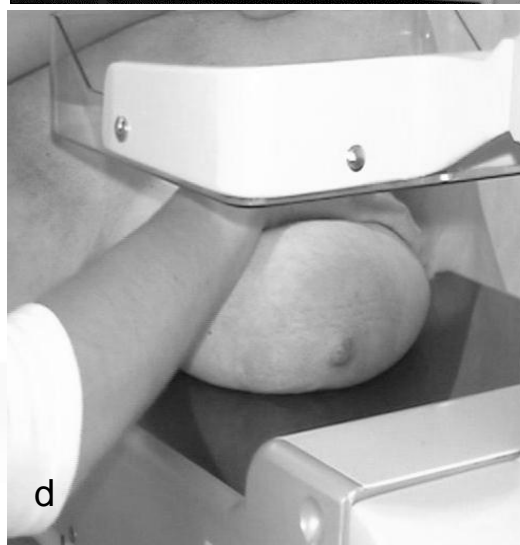
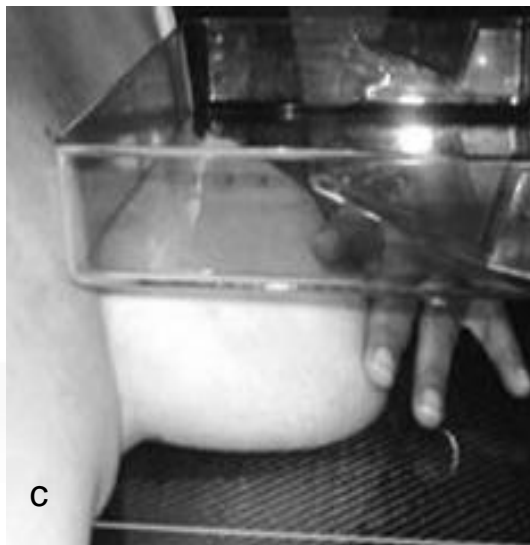


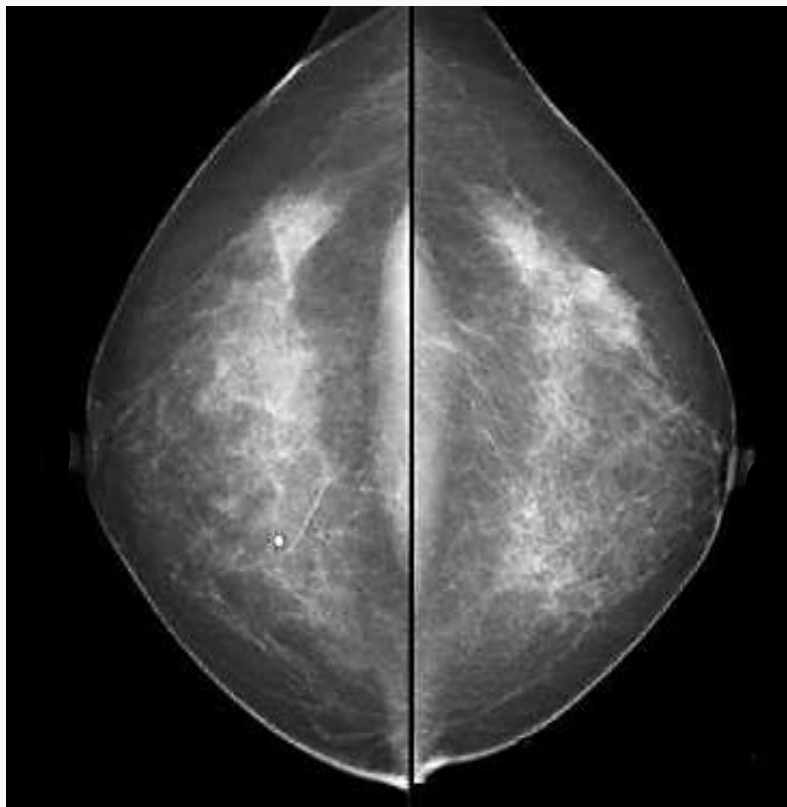
SECONDO SETTORE



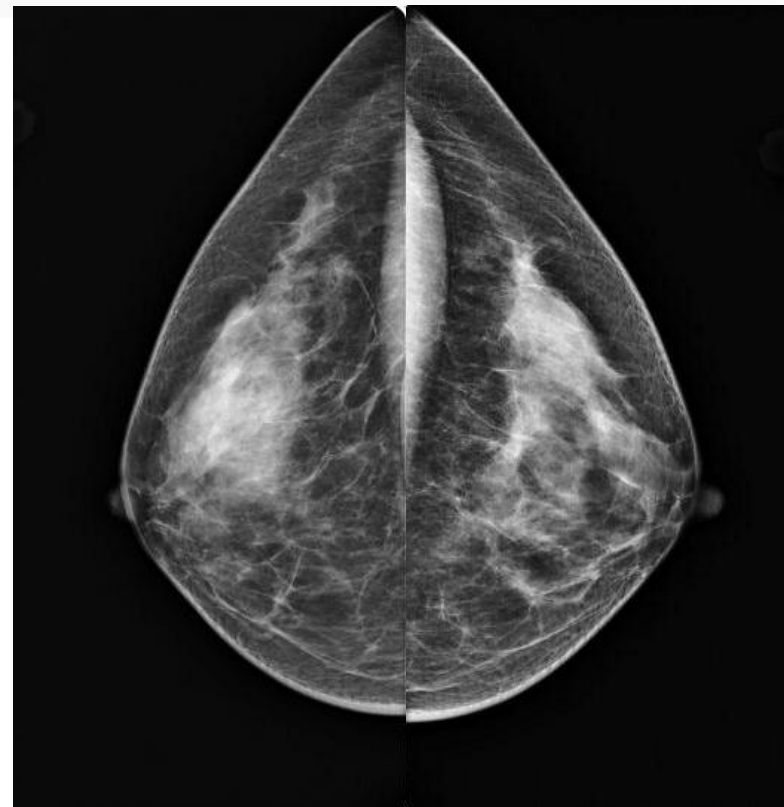
Manovra di posizionamento della mammella controlaterale per la completa rappresentazione dei QQII e del solco inframammario

TERZO SETTORE





CC CORRETTE

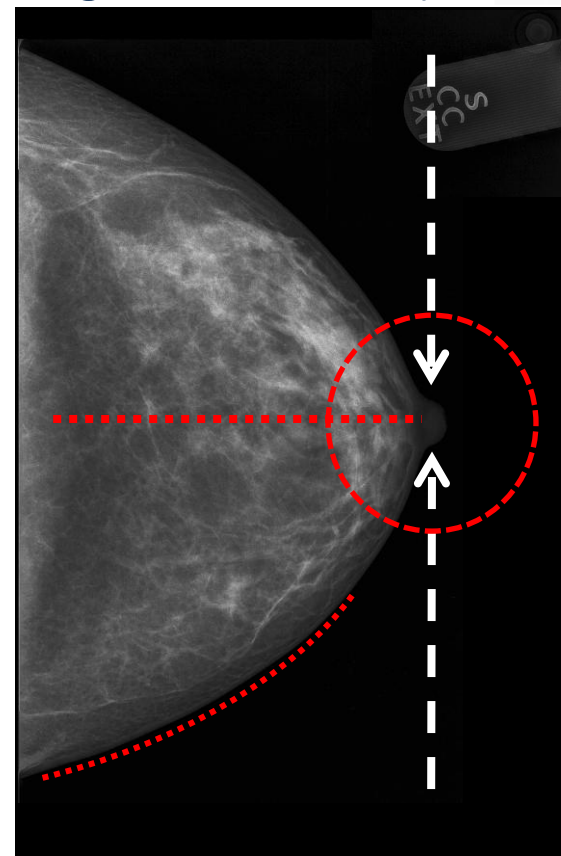


CC "ESAGERATE"

PGMI IMAGES EVALUATION SYSTEM (Perfect, Good, Moderate, Inadequate)

1. All breast tissue imaged (fat visualised posterior to glandular tissue)

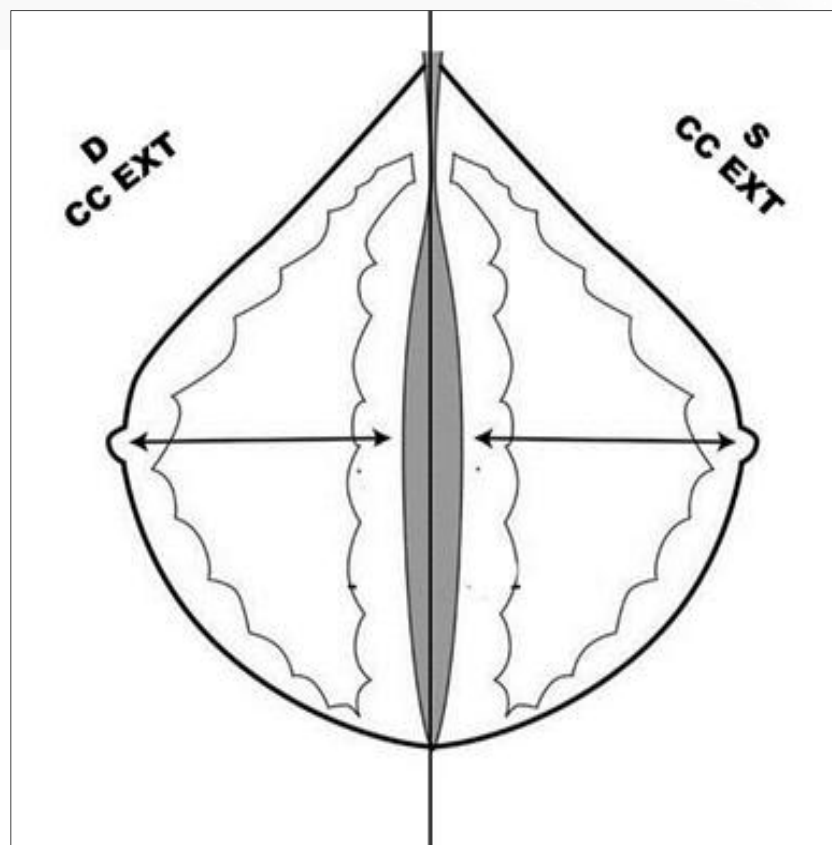
- *medial border well demonstrated*
- *nipple in profile*
(retro-areolar tissue well separated)
- *nipple in midline of imaged breast*
- *posterior nipple line (PNL) within 1cm of PNL on MLO view*



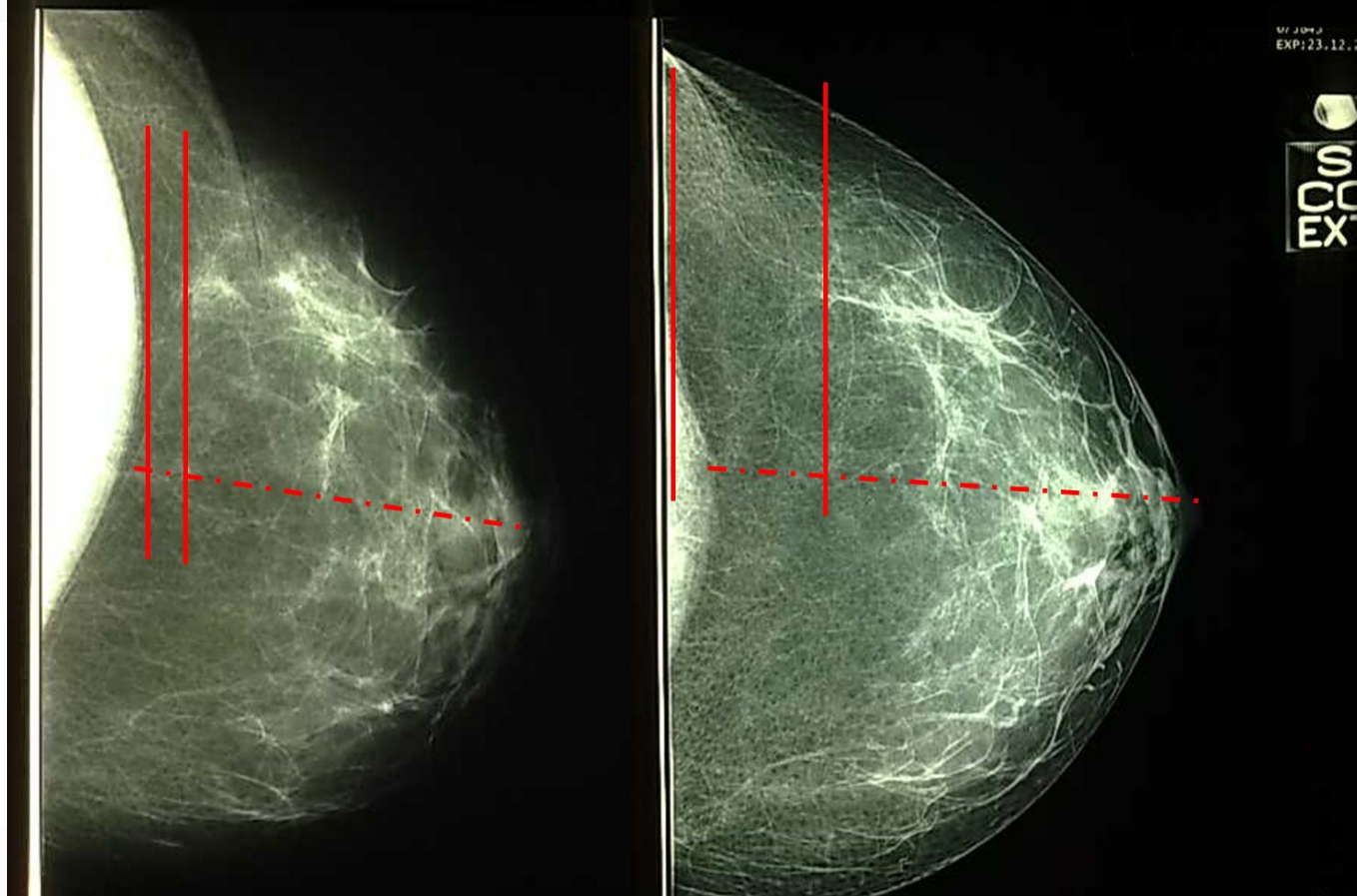
PNL – Posterior Nipple Line

linea capezzolo-m.pettorale

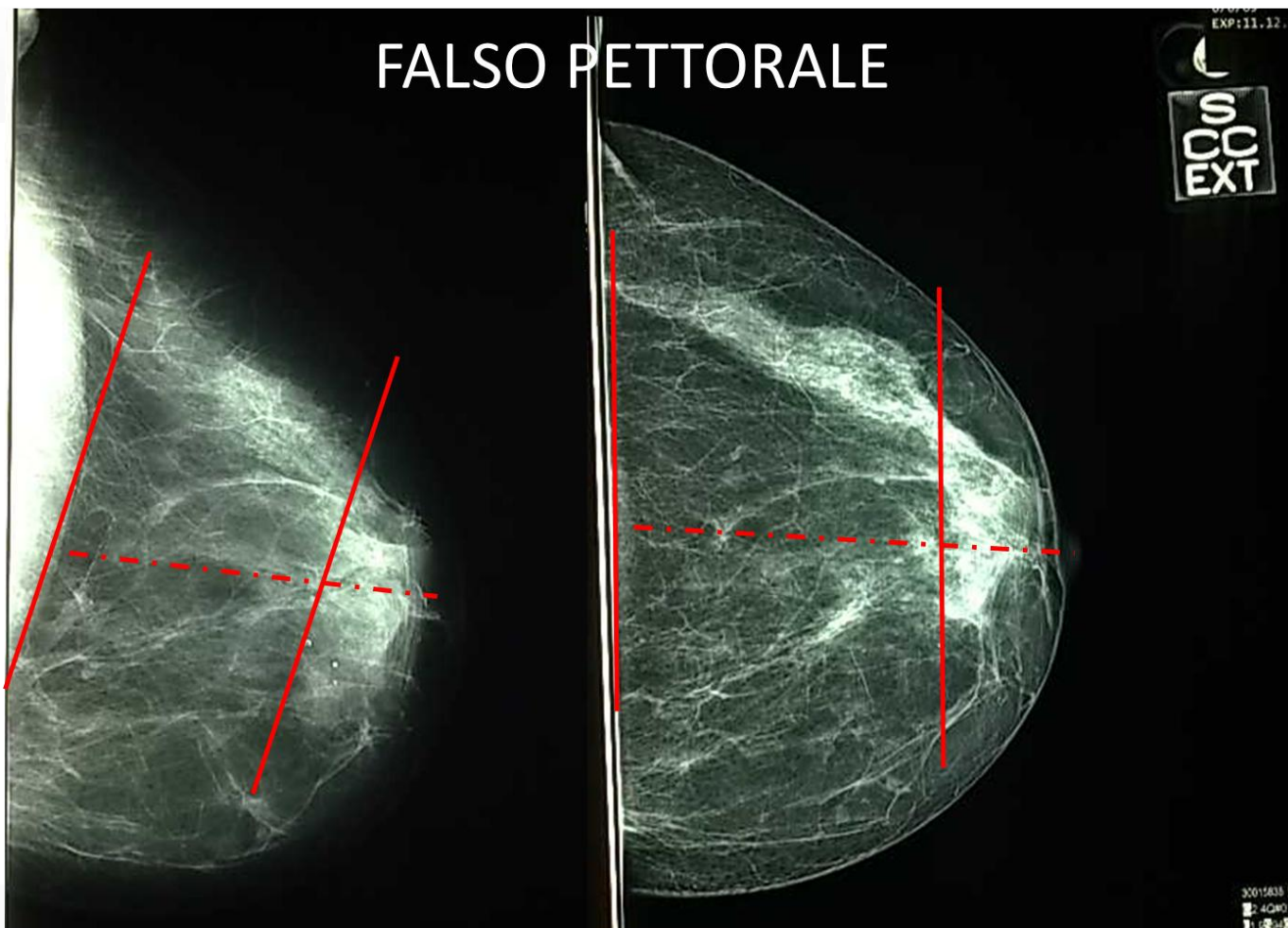
o margine posteriore dell'immagine in
assenza del muscolo pettorale

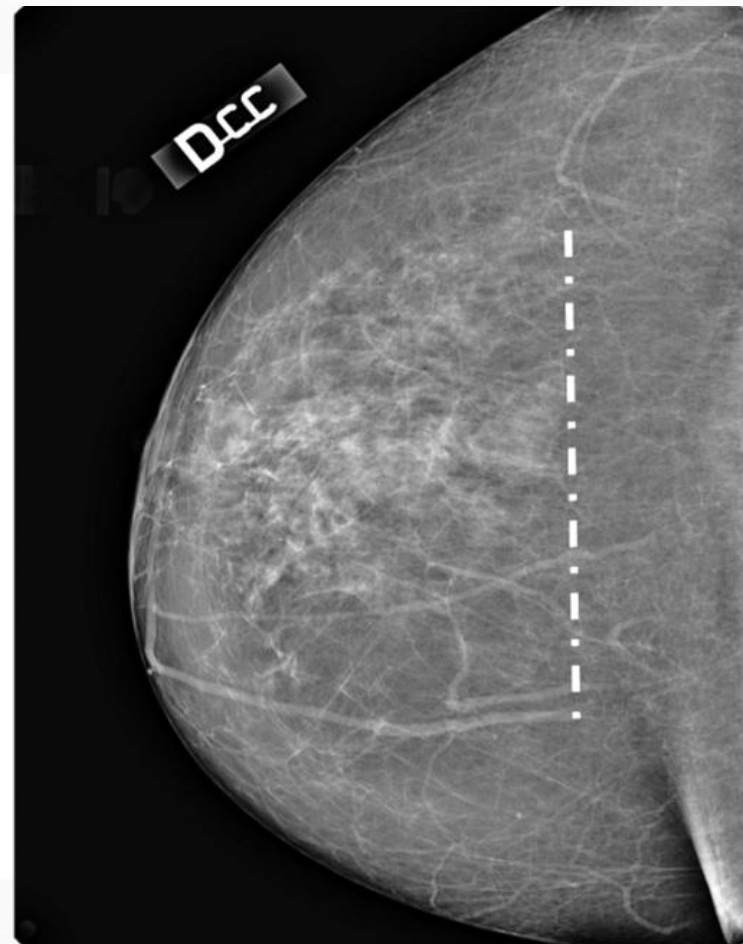
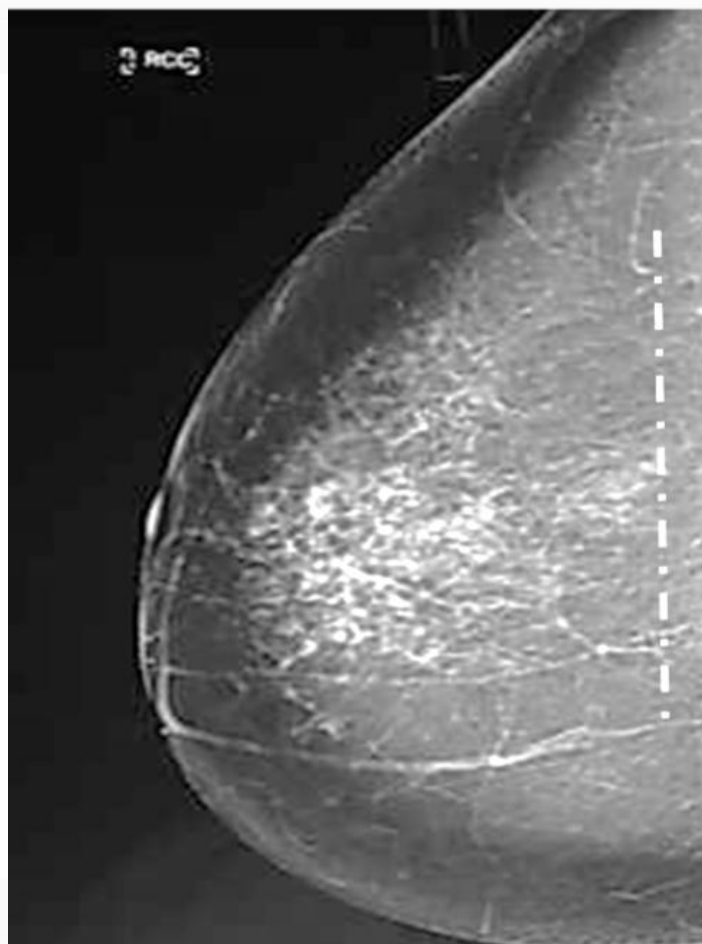


FALSO PETTORALE



FALSO PETTORALE

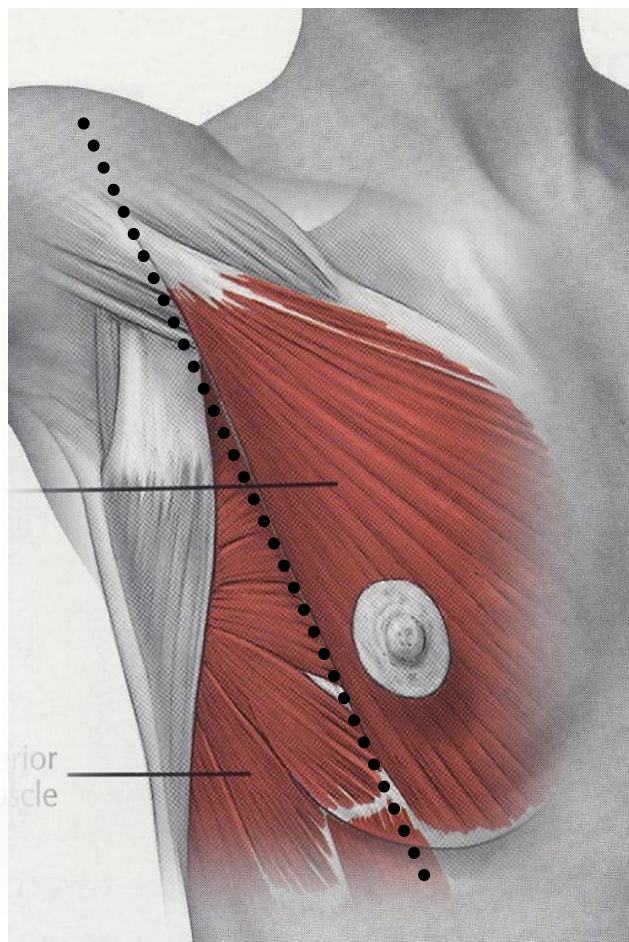




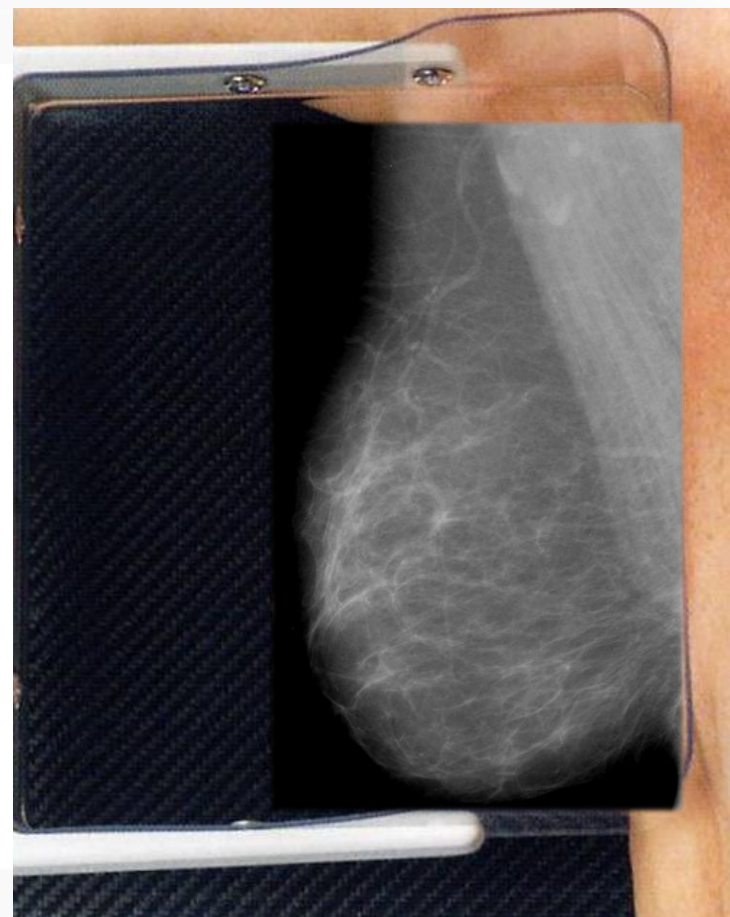
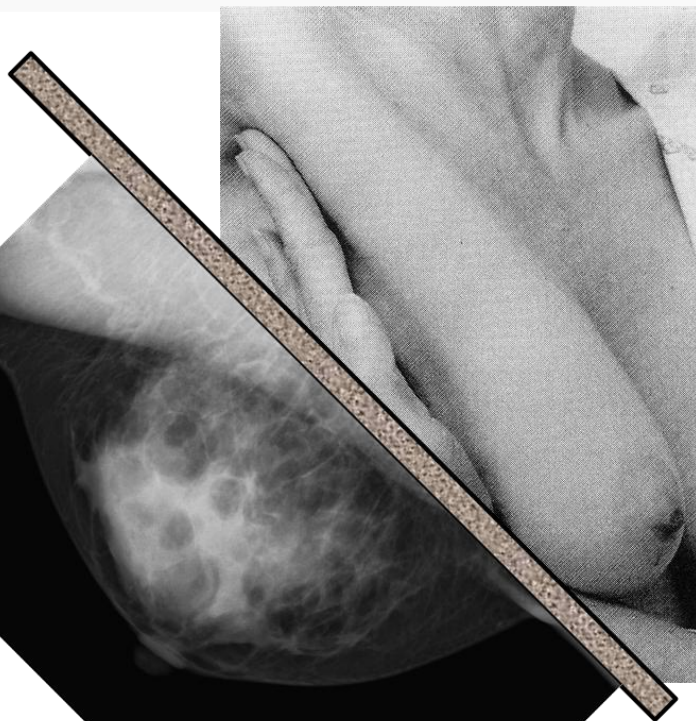
PROIEZIONE OBLIQUA VERA (MLO VIEW)

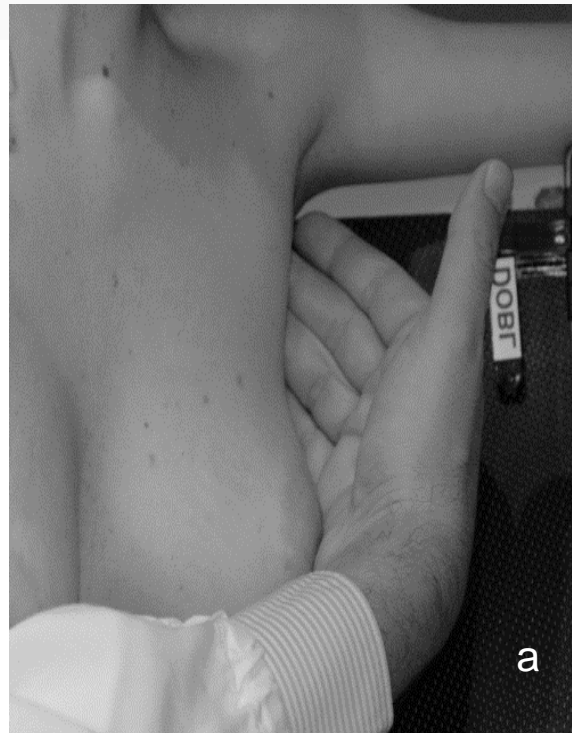
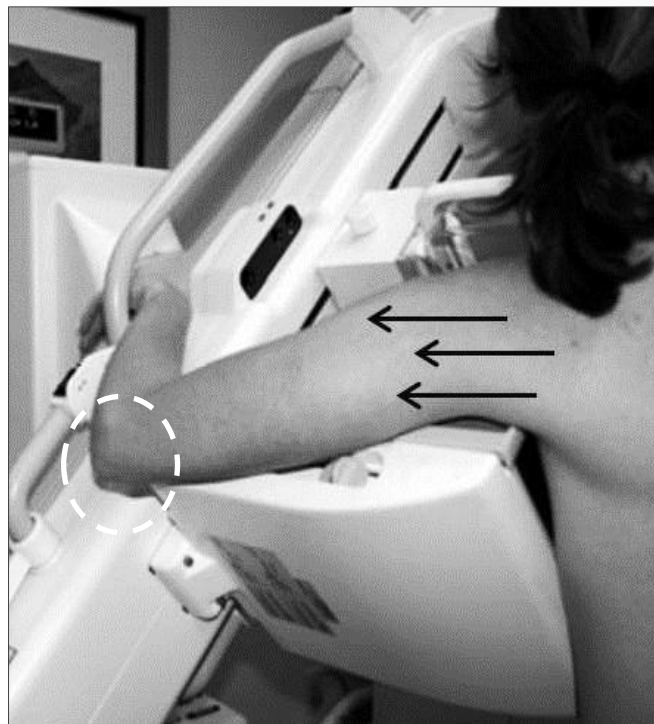
Soggetto longilineo:
 $\alpha 45^\circ - 60^\circ$

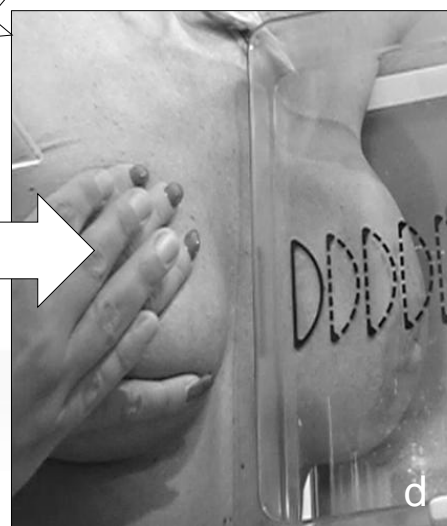
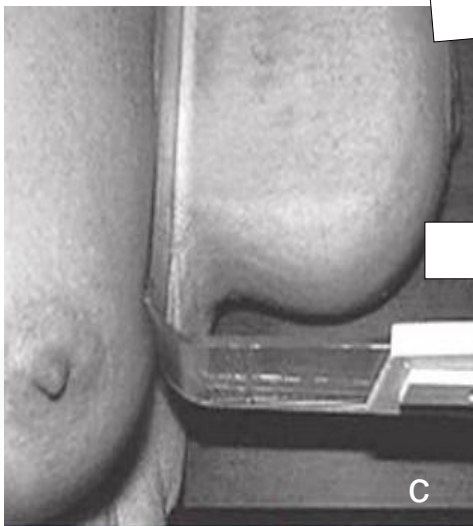
Soggetto brevilineo:
 $\alpha 35^\circ - 45^\circ$

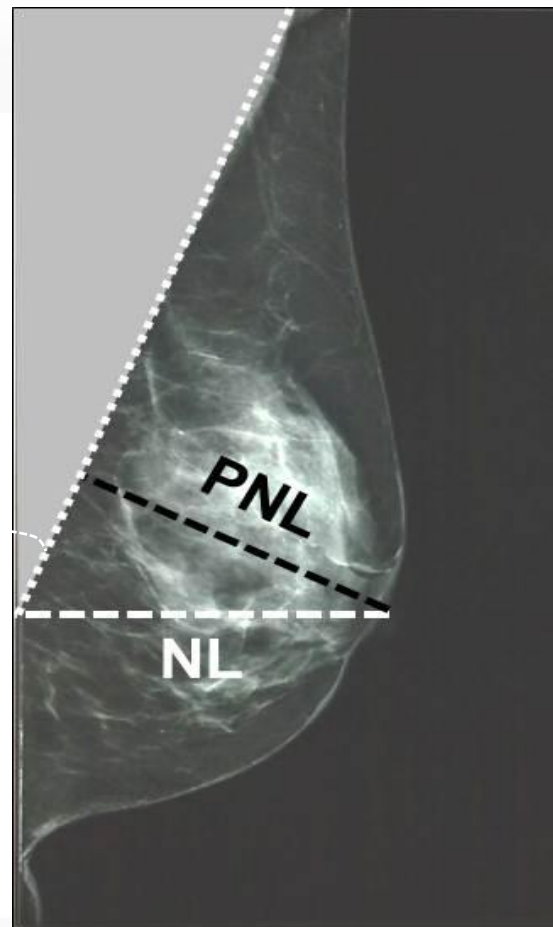
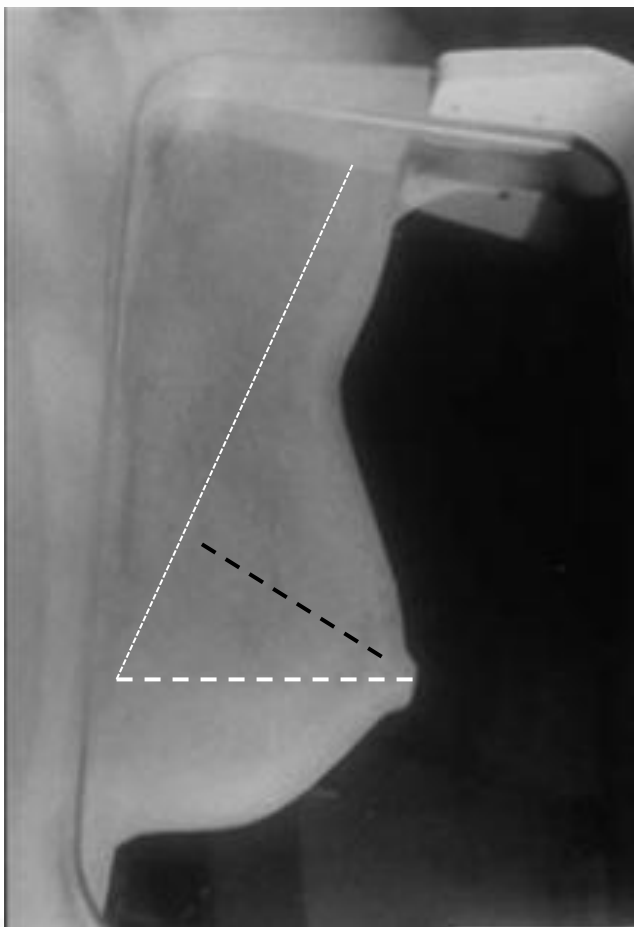


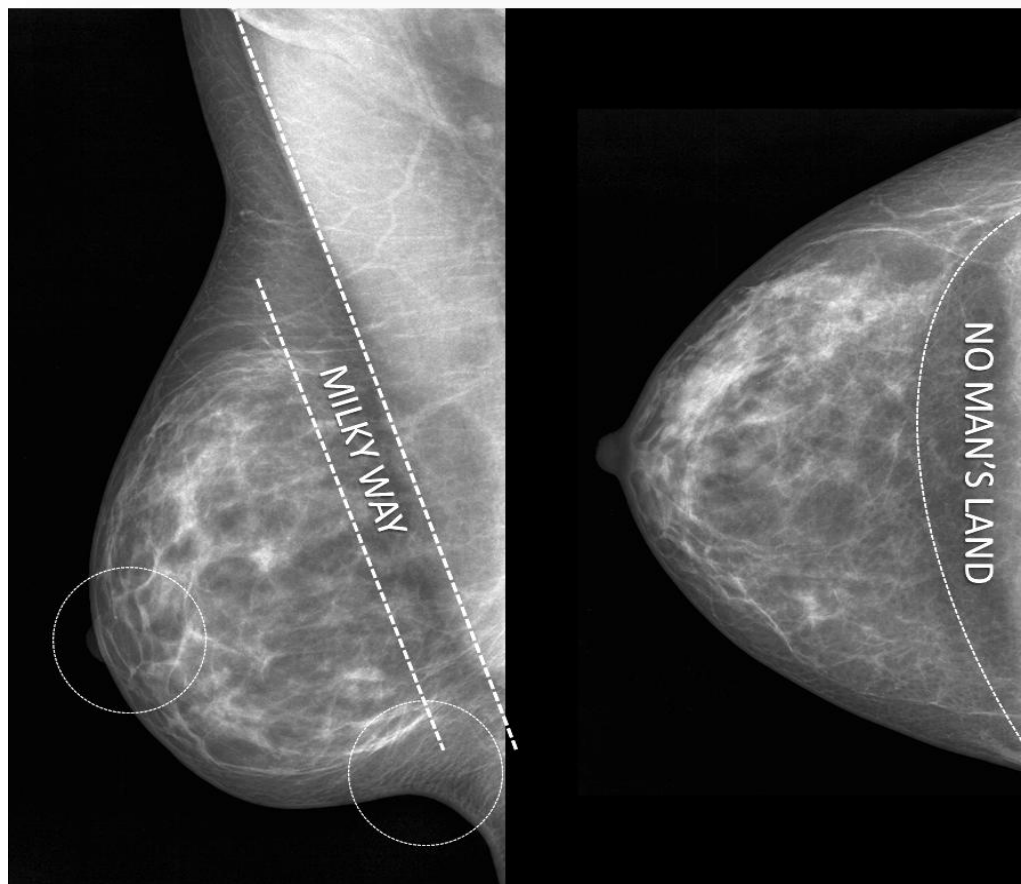
α Potter = 45°
 α pettorale = 57°











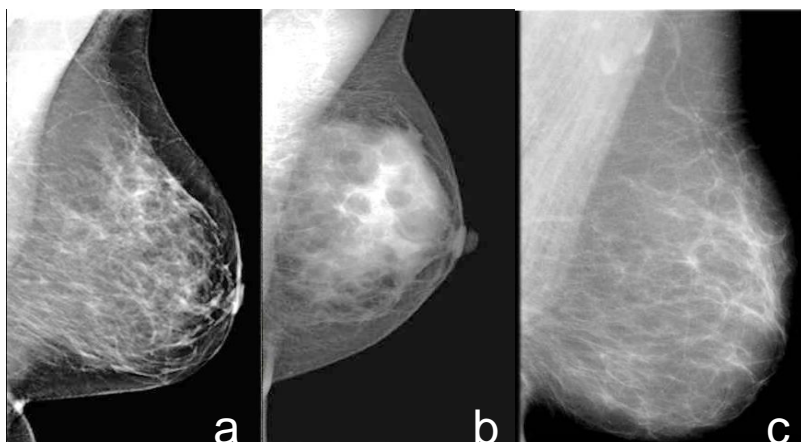
"FORBIDDEN AREAS"

MLO

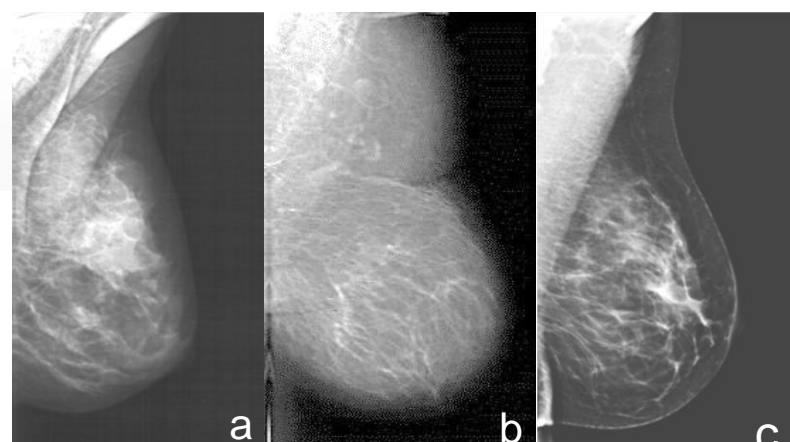
spazio retroghiandolare (*milky way*)
spazio retroareolare
angolo sottomammario

CC

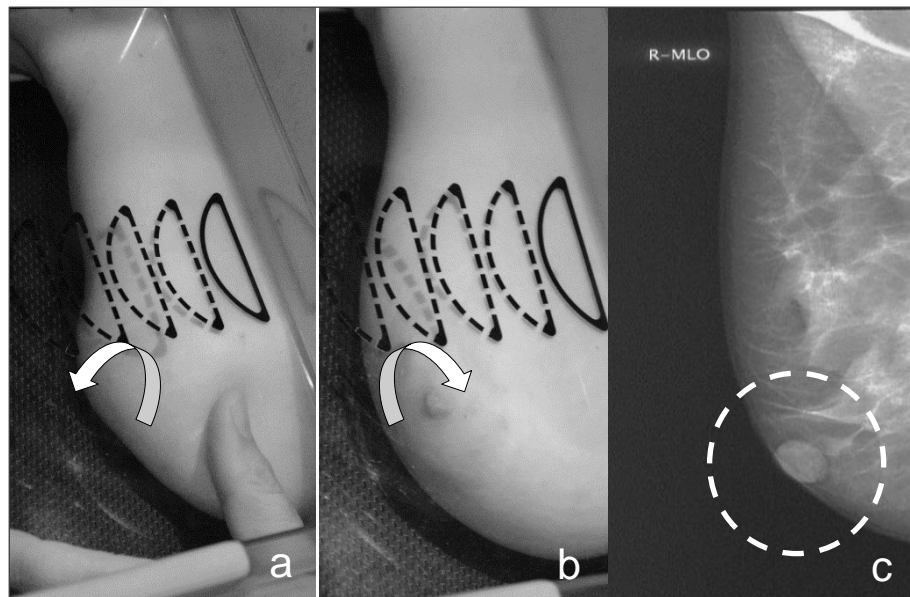
Spazio retroghiandolare (*no man's land*)



Rappresentazione non ottimale del muscolo pettorale

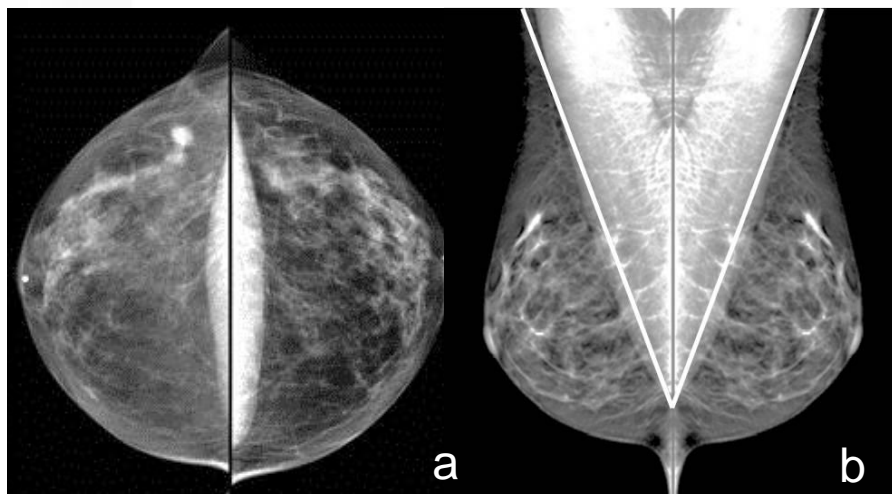


Errori di posizionamento più comuni

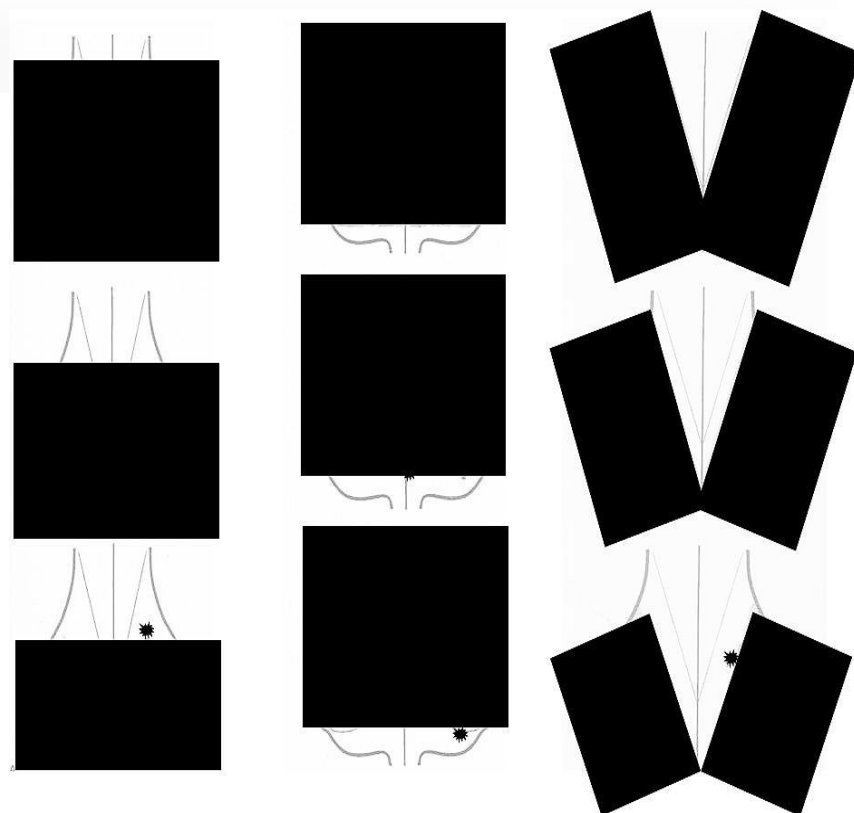


Rotazione del capezzolo e relativo artefatto sul mammogramma

Inadeguata rappresentazione del m.pettorale in MLO	22%
Aspetto "a naso di cammello" in MLO	14%
Scarsa rappresentazione dei tessuti profondi in MLO	14%
Pliche cutanee sovrapposte al tessuto mammario	12%
Scarsa rappresentazione dei tessuti profondi in CC	11%
Differenza PNL MLO/CC maggiore di 1cm	10%
Eccessiva lateralizzazione o medializzazione in CC	6%
Piano sensibile troppo elevato	4%
Incompleta rappresentazione dei tessuti	3%
Altre cause	4%



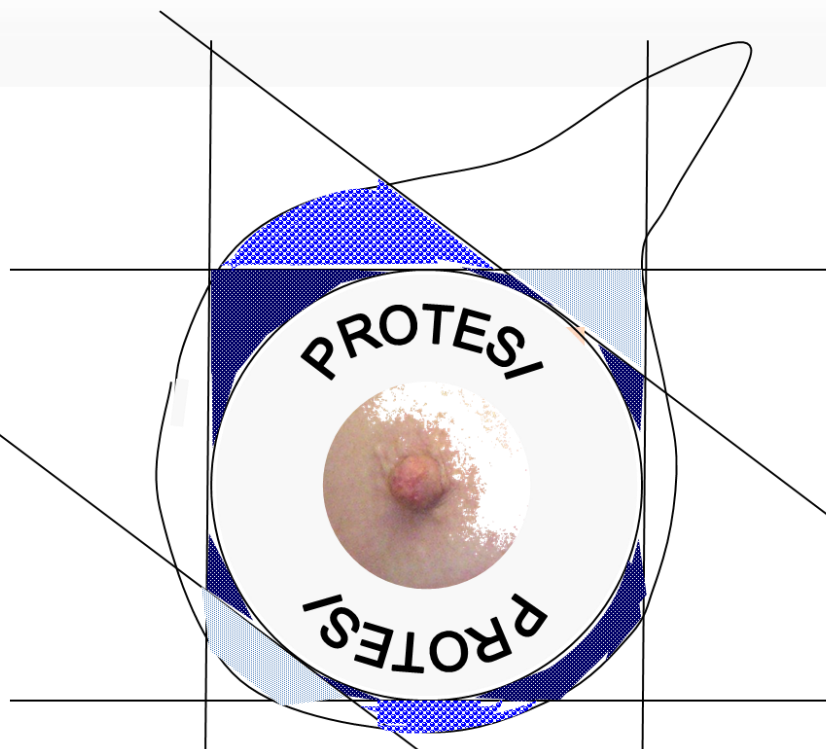
La simmetria del posizionamento garantisce la specularità delle immagini



TECNICA DI EKLUND

Il numero di donne portatrici di protesi mammarie
è in aumento costante

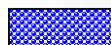
(6.000.000 nel 2013 – 80% estetiche)



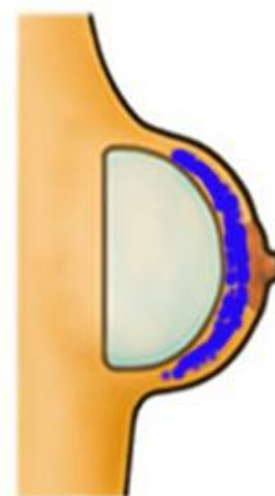
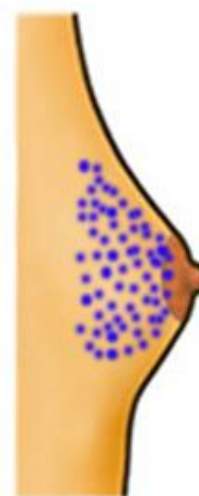
TESSUTO MAMMARIO NON VISIBILE IN CC E ML

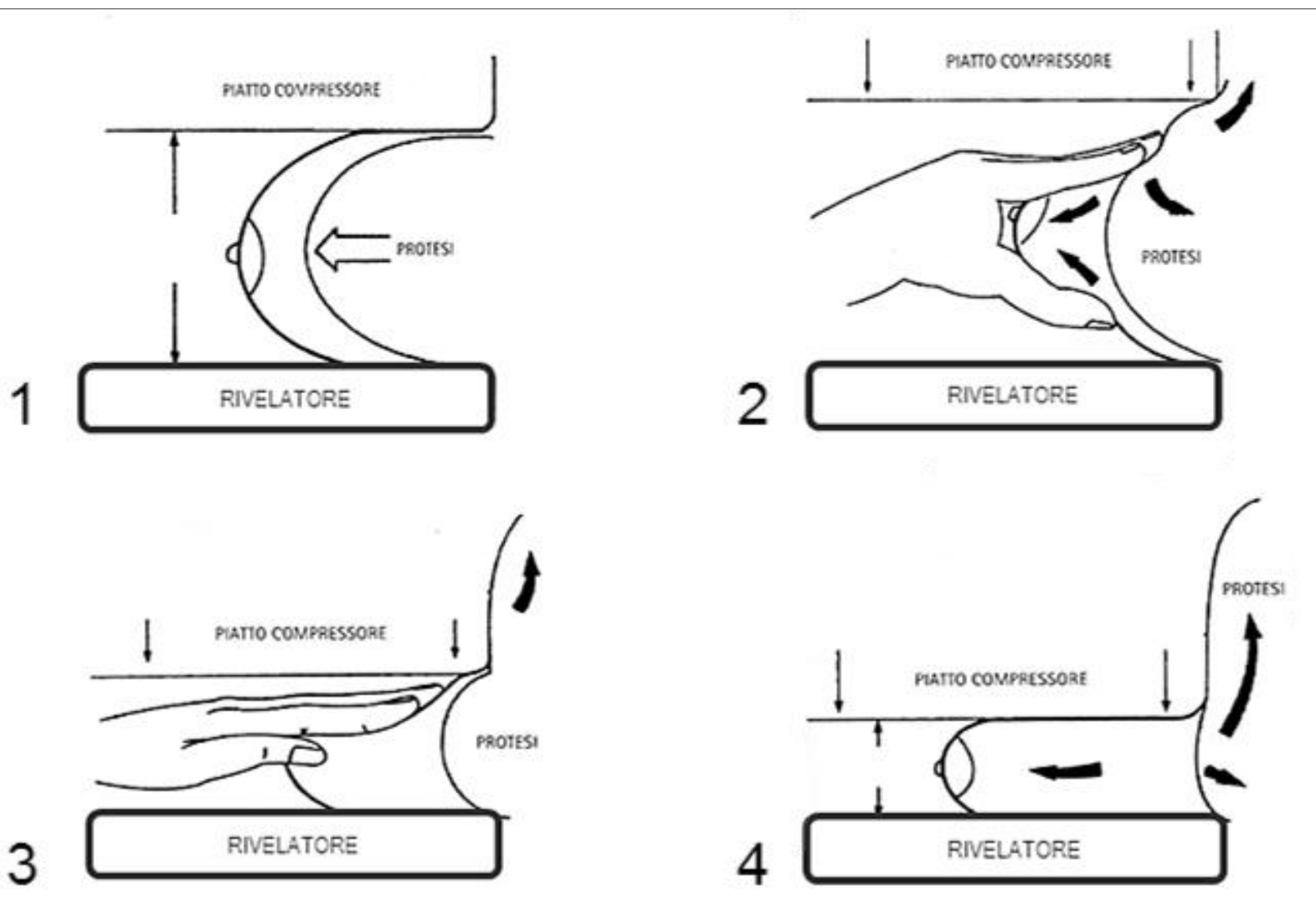


TESSUTO MAMMARIO RESIDUO NON EVIDENZIABILE IN NESSUNA DELLE TRE PR.

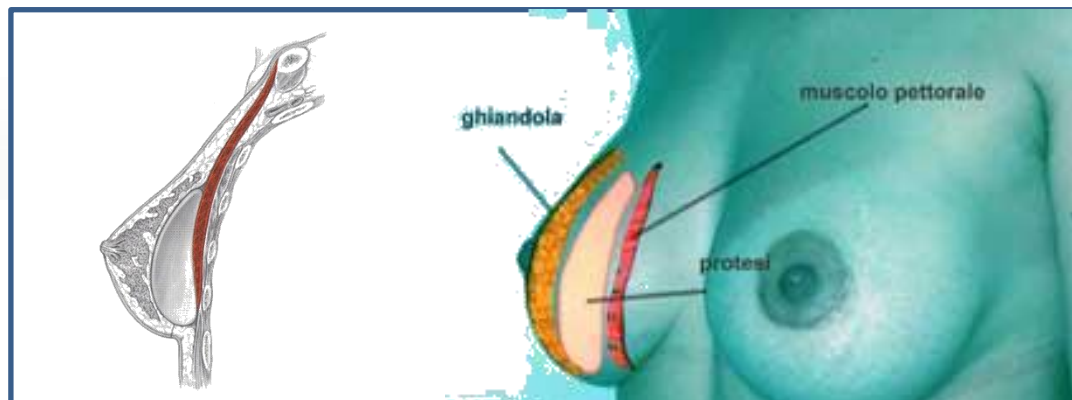


TESSUTO MAMMARIO NON VISIBILE IN CC E MLO

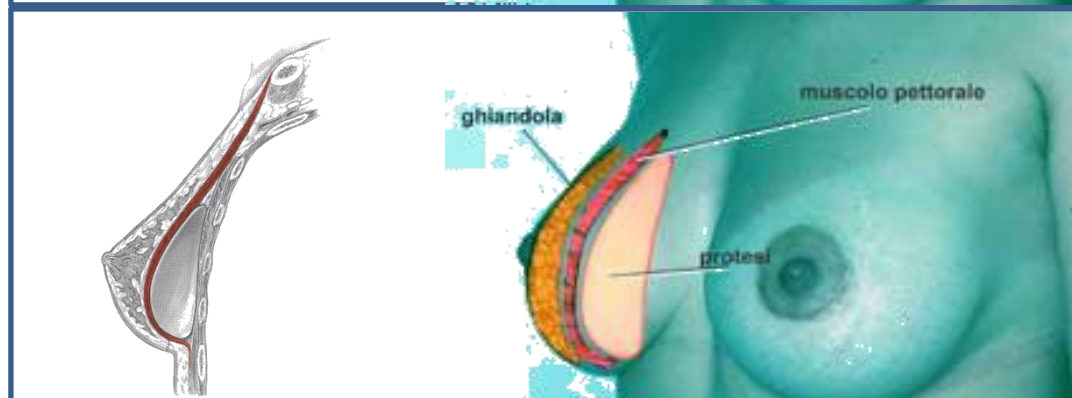




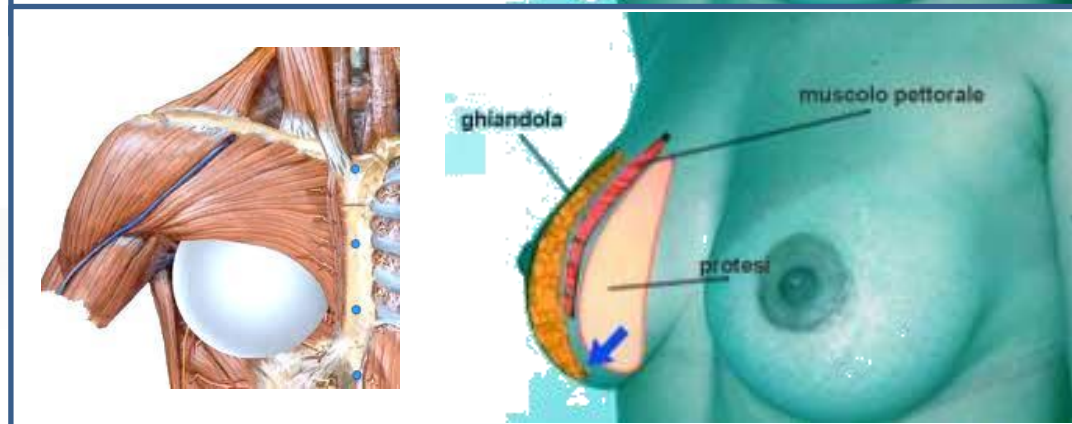
RETROGHIANDOLARE

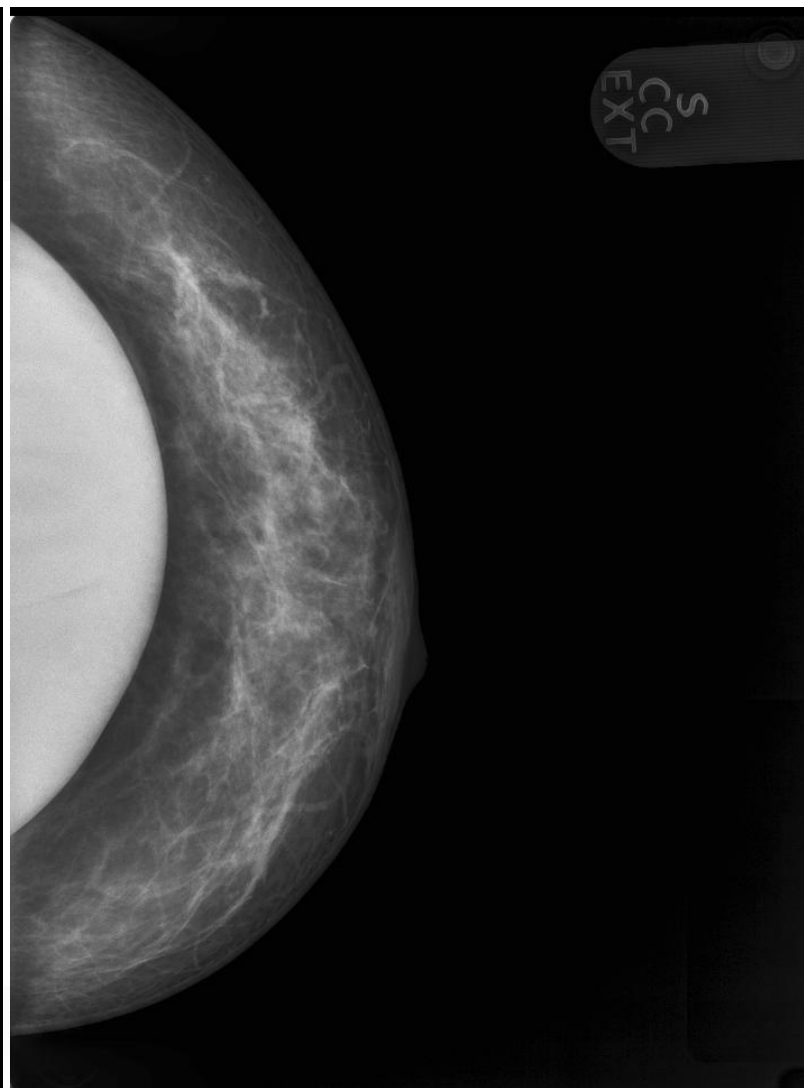


RETROMUSCOLARE

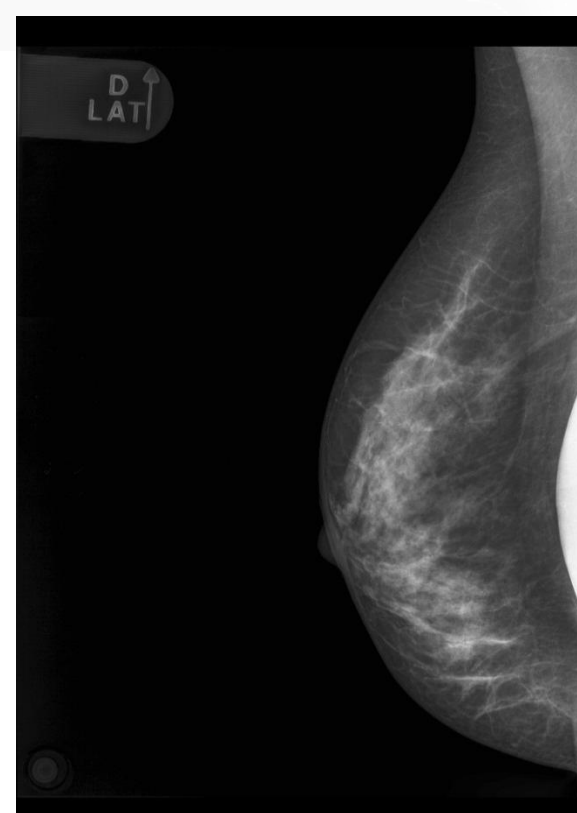
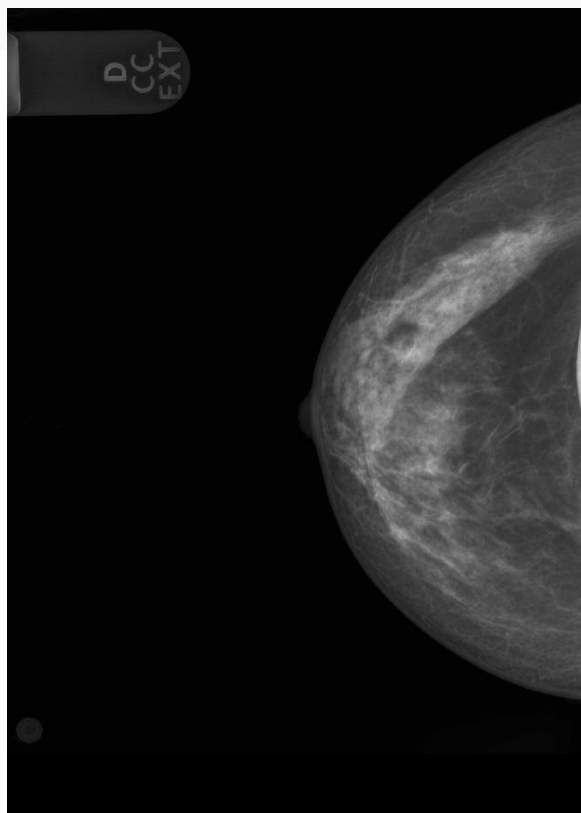


DUAL PLANE

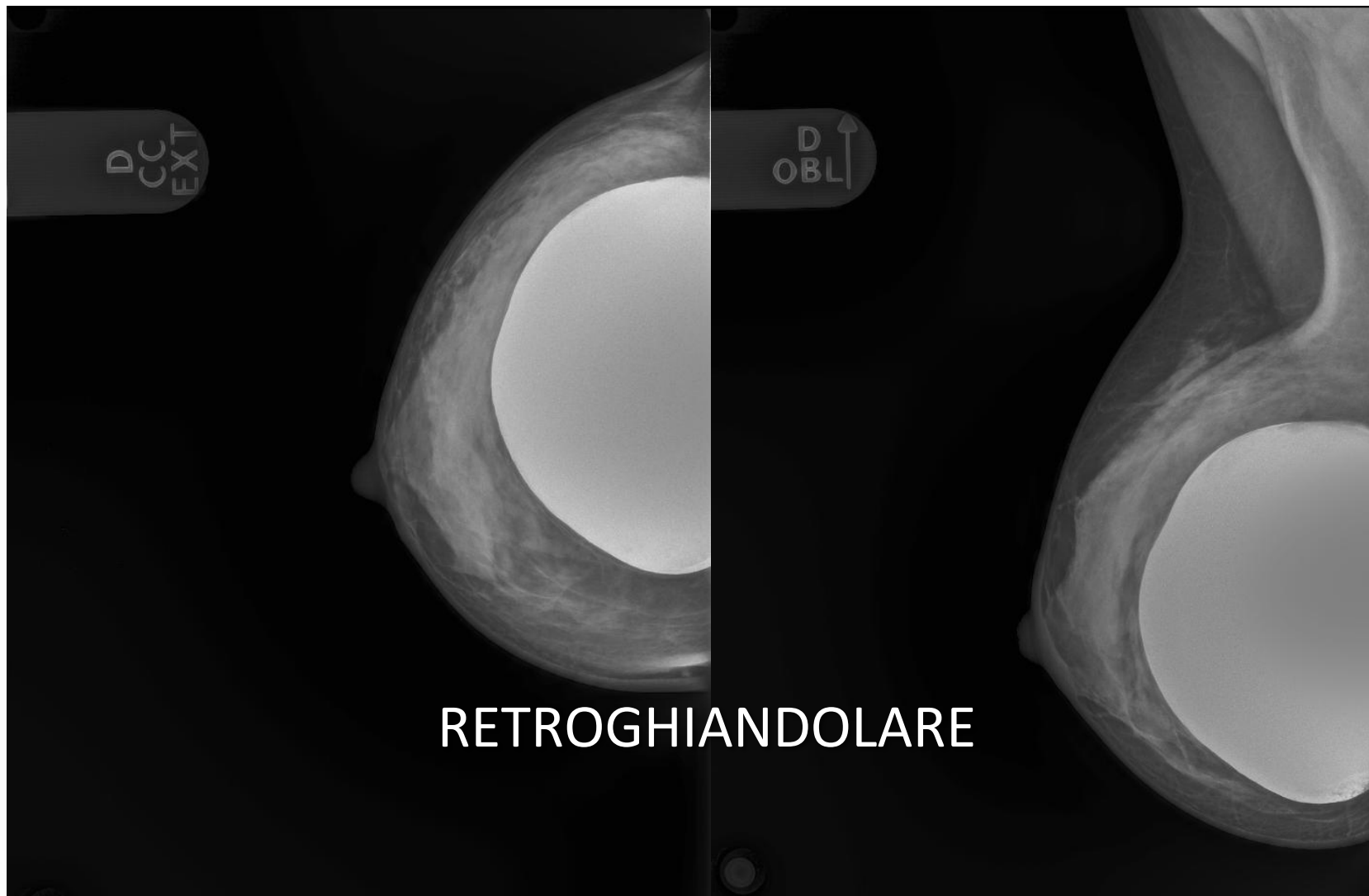


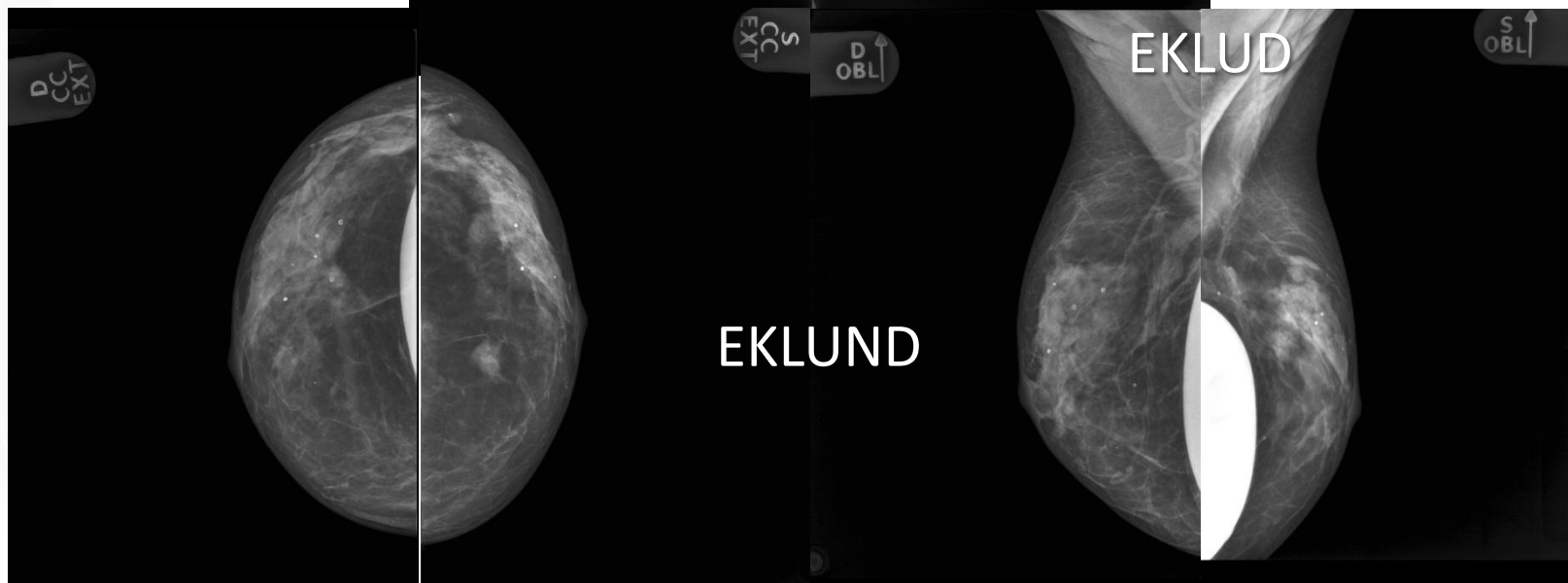
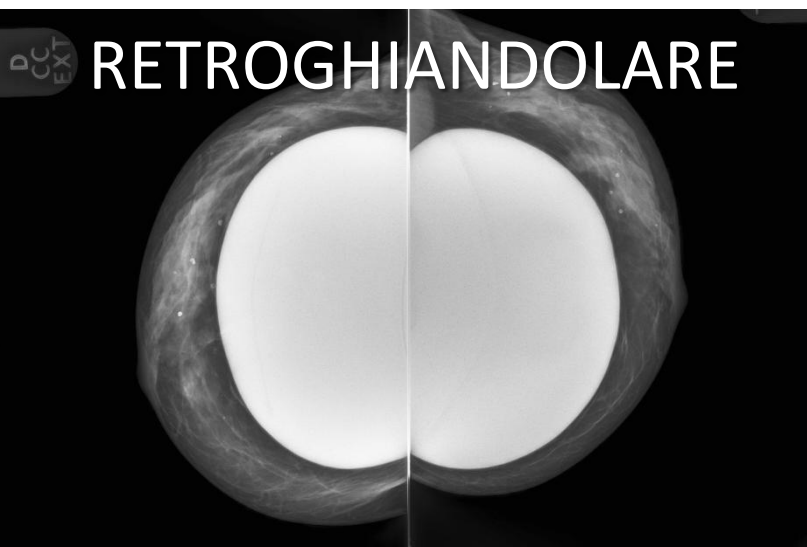


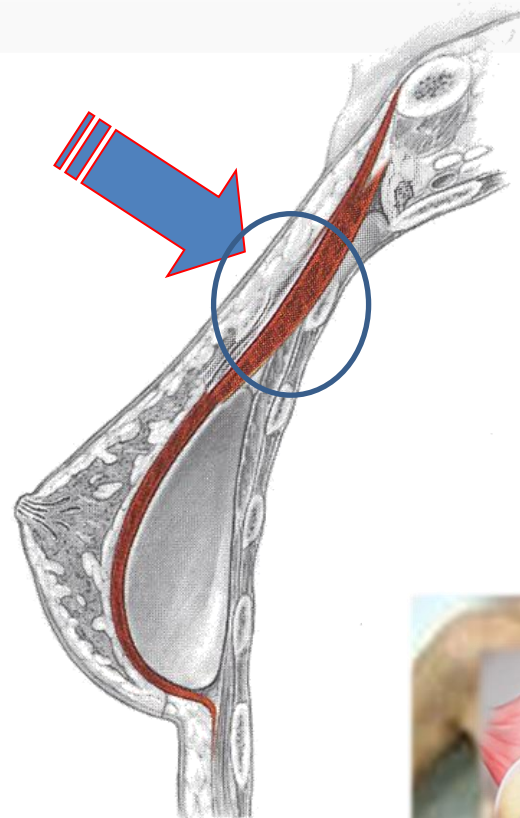
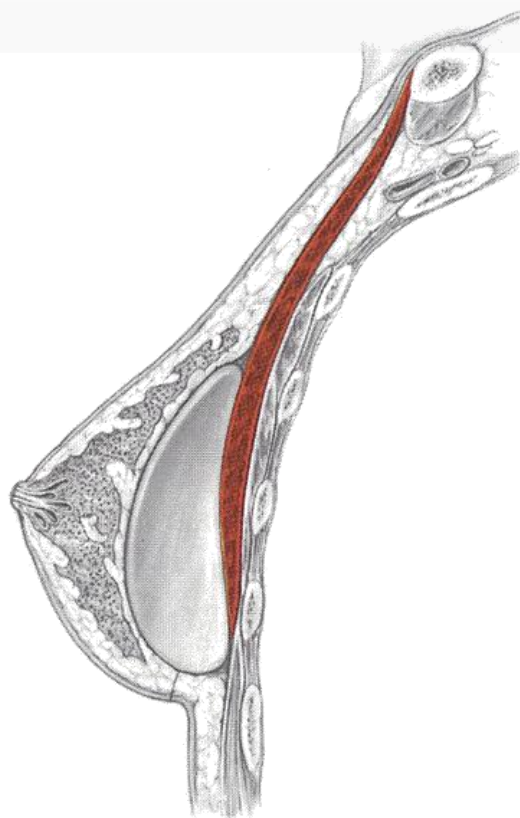
RETROMUSCOLARE



RETROMUSCOLARE
EKLUND







PROTOCOLLI MAMMELLE CON PROTESI

CC + OML + ML

Con MdE

ML

standard

Eklund et al.

CC + OML + ML

Con MdE

CC + OML + ML

standard

Einlein y Bassett

CC + OML

Con MdE

CC + ML

standard

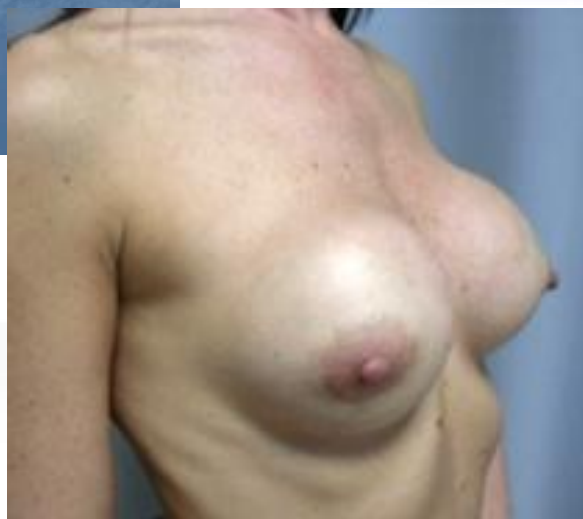
CC + LM

standard

Silverstein et al.

QUANDO NON ESEGUIRE LA MANOVRA DI EKLUND

Mammographer's Nightmare



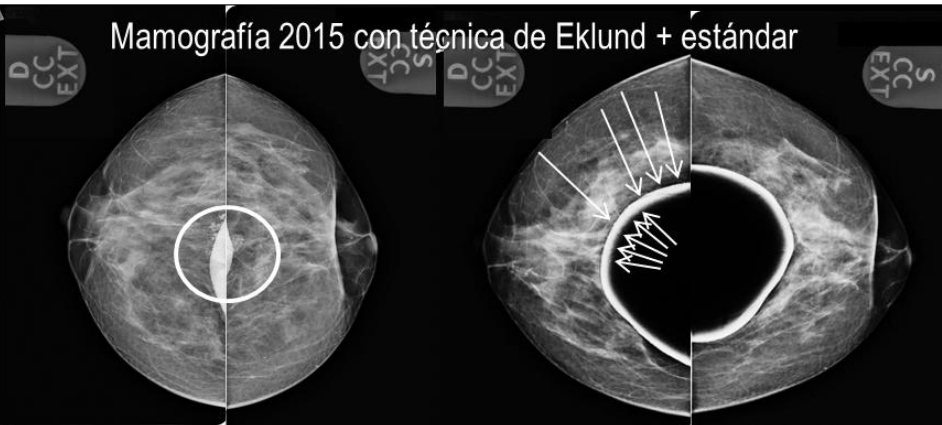
Donna di 46 aa.

2011. Mammografia SFM

2013. Mammografia digitale senza proiezioni con MdE (immagini+CD) negativa

2015. Mammografia digitale con proiezioni con MdE che evidenzia microcalcificazioni nel tessuto periprotetico

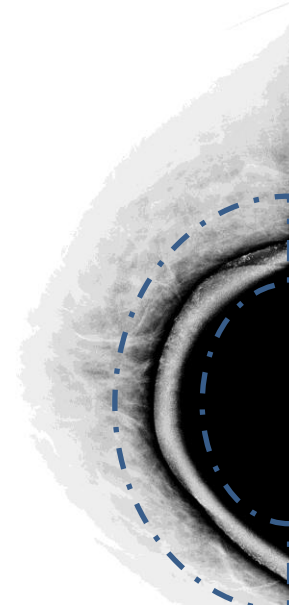
Mamografia 2015 con técnica de Eklund + estándar



Mamografia 2011 (analógica – solo proyecciones estándar)



Mamografia 2013 (digital - solo estándar)
Elaboración de la imagen en archivo DICOM





Grazie per l'attenzione!

Stefano Pacifici

Unità di Diagnostica Senologica

Ecotomografia medica Srl - Roma