

Review

Mammary Paget's Disease: An Update

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Outline

1. What is Paget' s disease in breast?
2. Clinical Features
3. Image of Mammography and Sono



Paget's disease

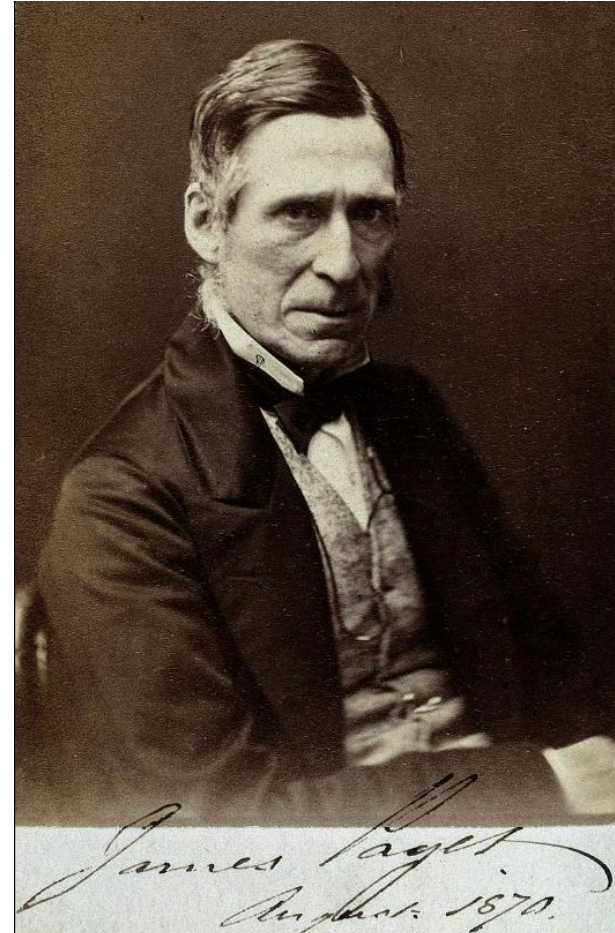
英國病理學家 Sir James Paget (1814–1899)

首次發表年分：1874 年

描述病患乳頭及乳暈出現濕疹樣變化，後來發現這些患者大多數都有乳腺癌。因此，這種病變被命名為 **Paget's disease of the breast** (乳房帕傑特病)。

女性與男性皆可發生，但大多數病例在女性族群。並且在所有乳癌病例中，約 **1% 至 4%** 的患者同時患有 **Paget's disease**。

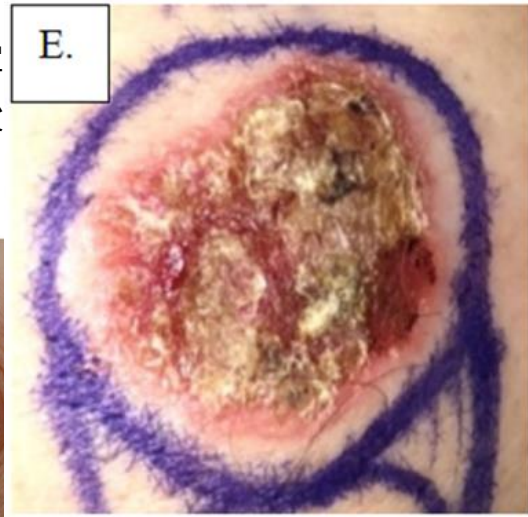
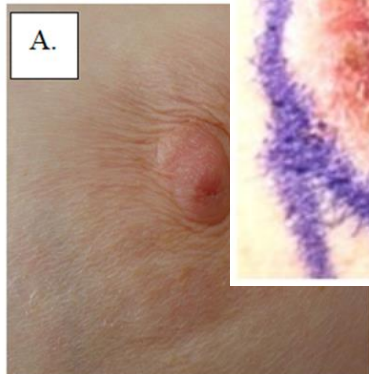
平均年齡：57 歲



Paget's disease

MDP is diagnosed initially based on clinical presentation, physical examination, and breast imaging. Both benign and malignant processes can produce visible symptoms in the skin of the nipple. However, if apparently benign skin changes do not improve after a two-week course of topical corticosteroids, a diagnostic imaging work-up and biopsy should be performed.

乳頭和乳暈
痕、出血後



片狀、裂



發展進程

Paget's disease

MDP is diagnosed initially based on clinical presentation, physical examination, and breast imaging. Both benign and malignant processes can produce visible symptoms in the skin of the nipple. However, if apparently benign skin changes do not improve after a two-week course of topical corticosteroids, a diagnostic imaging work-up and biopsy should be performed.

With Paget cells, HER2(+), estrogen(-) and progesterone antigens(-)

Table 1. Presenting symptoms of MPD.

Presenting Symptoms and Signs among 223 Patients [9]	Percentage of Patients Displaying Each Symptom
Eczema or ulceration of the nipple	98%
Malignancy suspicious mammogram	32%
Palpable breast mass	15%
Bloody nipple discharge	10%

Mammography

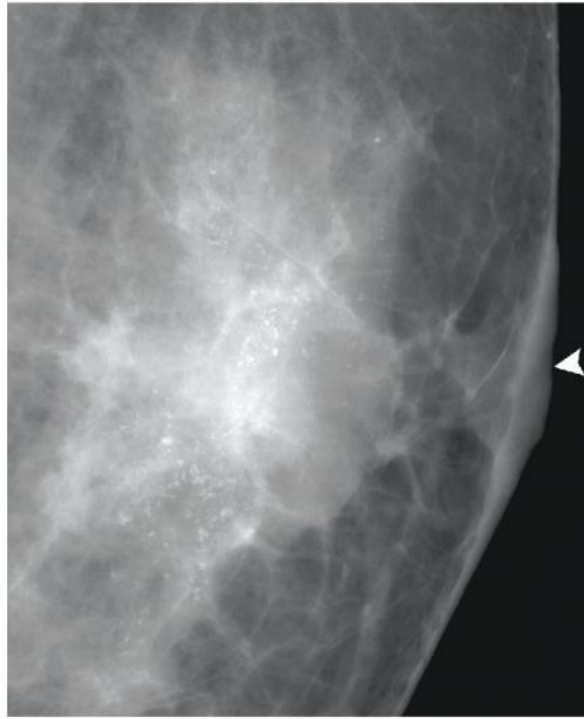
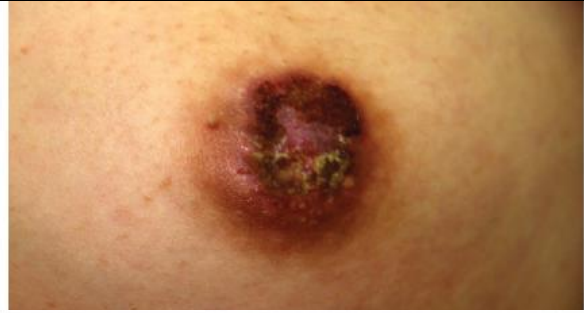
Mammography should be used as the primary diagnostic imaging modality for detecting underlying carcinoma, followed by breast ultrasound if the mammogram is negative. Mammographic findings may include skin thickening of the nipple-areolar region, asymmetric density, nipple retraction, a discrete mass, and/or suspicious microcalcifications [14]. Mammography is 97% sensitive in detecting an underlying malignancy in MPD cases if a palpable mass is present clinically; however, it only detects underlying malignancy in 50% of cases if no palpable mass is present [2]. Following their study of 48 women with MPD, Dixon, et al. recommended against using mammography alone to evaluate MPD since it

Table 3. Mammographic findings in patients with biopsy-proven MPD.

Mammogram Findings among 58 Patients [16]	Percentage of Patients Exhibiting Findings
Normal findings	31%
Nipple, areolar, or subareolar abnormalities	24%
Evidence of masses or calcifications	45%

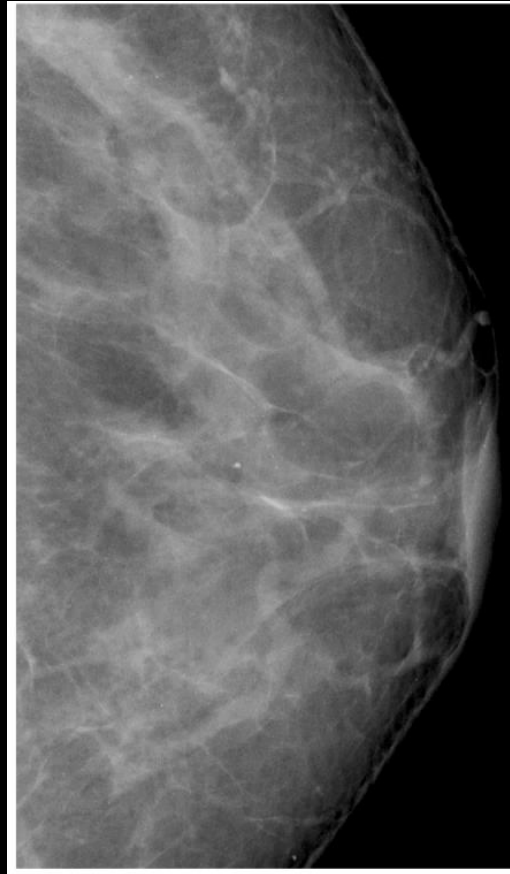
Mammography

36 y/o

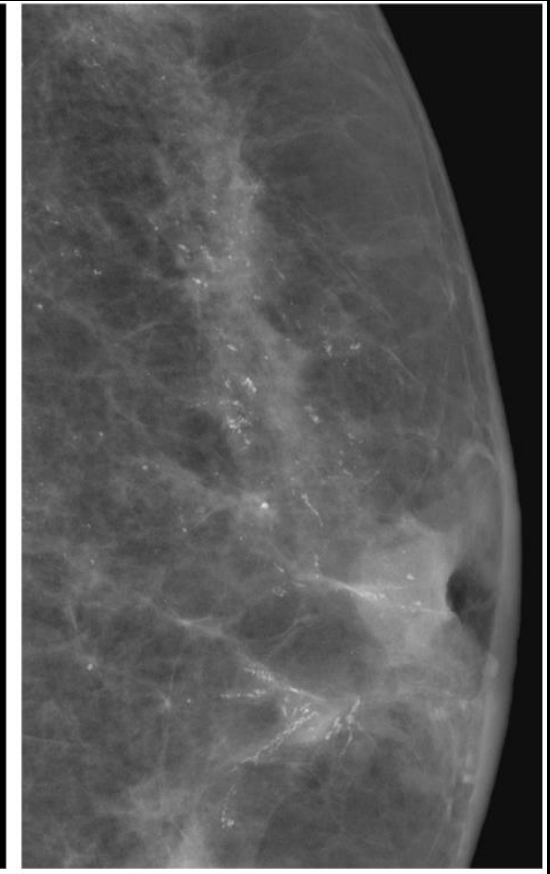


55 y/o

before

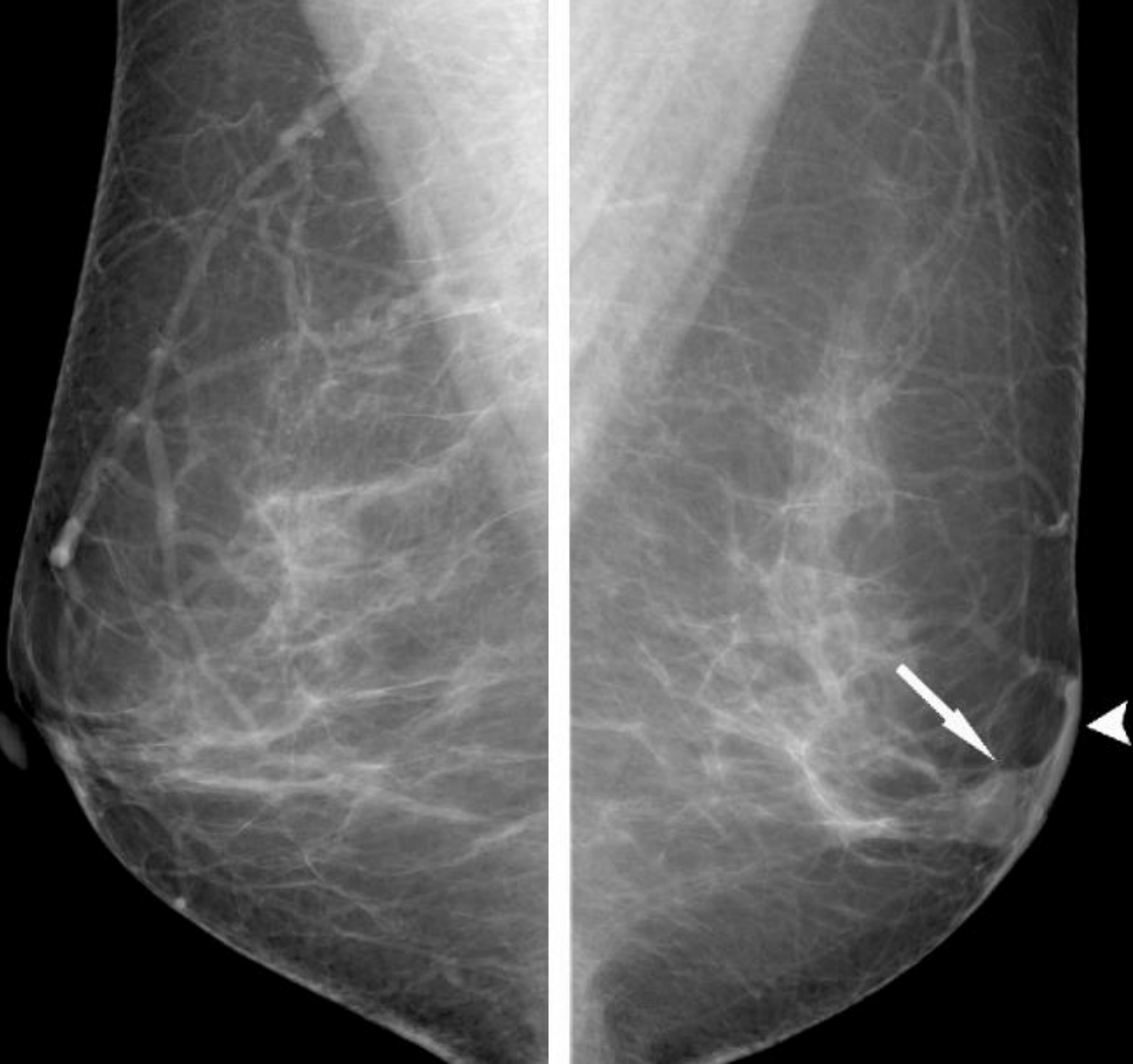


2 years later



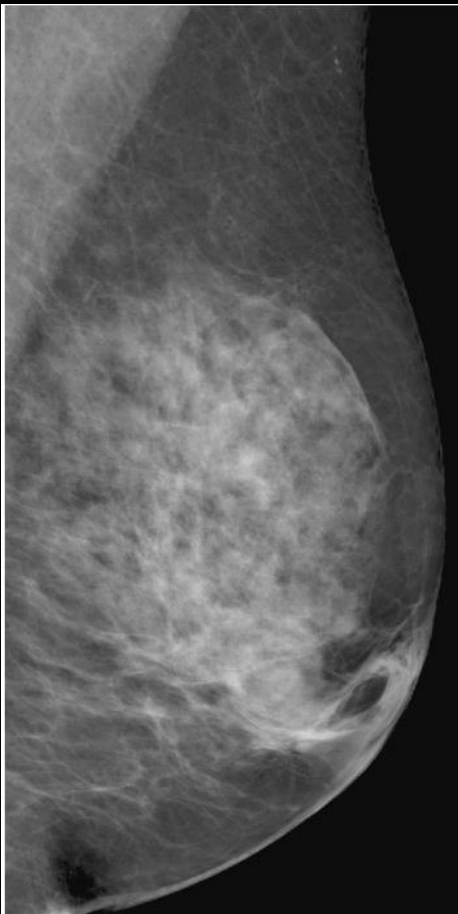
Mammography

61 y/o

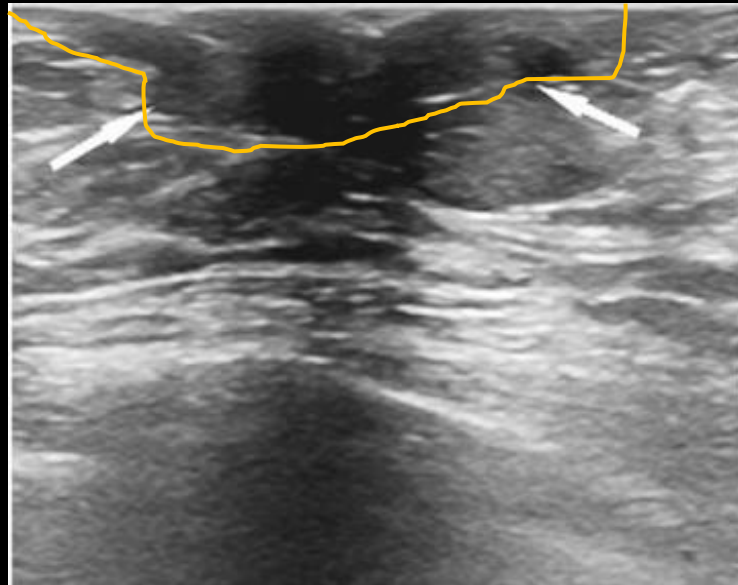


Sono

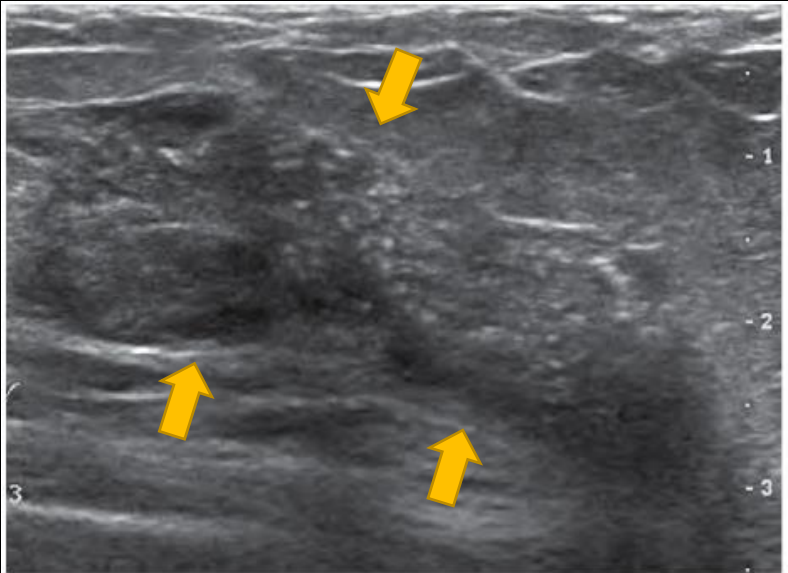
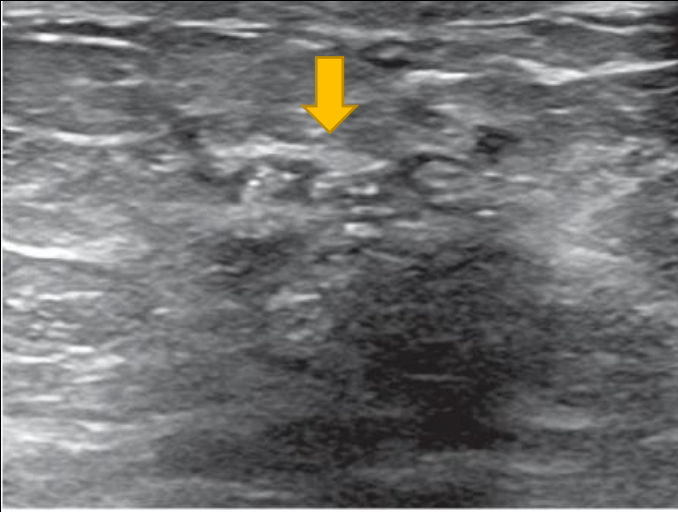
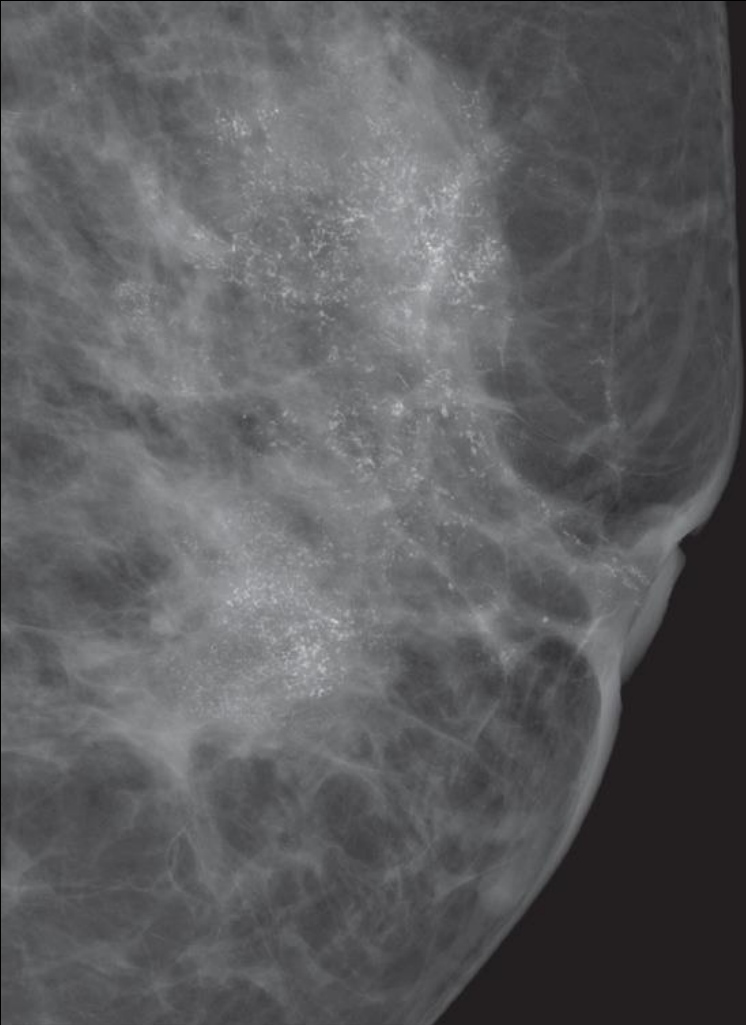
Breast ultrasound findings may include a mass, microcalcifications, ductal ectasia, and/or flattening, asymmetry, and thickening of the nipple-areolar complex [8]. Ultrasound may also be utilized to assess the appearance of the axillary nodes.



Paget disease of the left nipple in a 63-year-old woman.



Sono



Clinical Case

2024/01/22 乳房外科 蕭炳昆 ⓘ

65 y/o Female

History

BCFHx(-), Menarche 15, G2P2 , 1st at 25, ATH(myoma) at 43, No HRT

Subjective

Referred from abnormal MMG s/p sono

Objective

112.7.6 MMG:RILQ segmented rim calcifications (BR.0), sono: neg.
113.1.22 sono: bil. ductal ectasia, itching planus at areola(6')

Assessment

N63 Unspecified lump in breast

L23.9 Allergic contact dermatitis, unspecified cause

Plan

p't refuse Tomo.Bx. --> sono in 2025.1

2025/01/27 乳房外科 蕭炳昆 ⓘ

History

BCFHx(-), Menarche 15, G2P2 , 1st at 25, ATH(myoma) at 43, No HRT

Subjective

Referred from abnormal MMG s/p sono

Objective

112.7.6 MMG:RILQ segmented rim calcifications (BR.0), sono: neg.
113.1.22 sono: bil. ductal ectasia, itching planus at areola(6')

114.1.27 sono:

MMG:RLIQ segmented calcifications stationary

sono: Calcifications at right 6.5/1, right 6/0.5, right 6.5/4.

PE.: erythematous elevation over RLOQ areola-->suspected Paget's dis., suggest Bx.

Assessment

D05.11 Intraductal carcinoma in situ of right breast

Plan

p't refuse Tomo.Bx. since 112.7.6

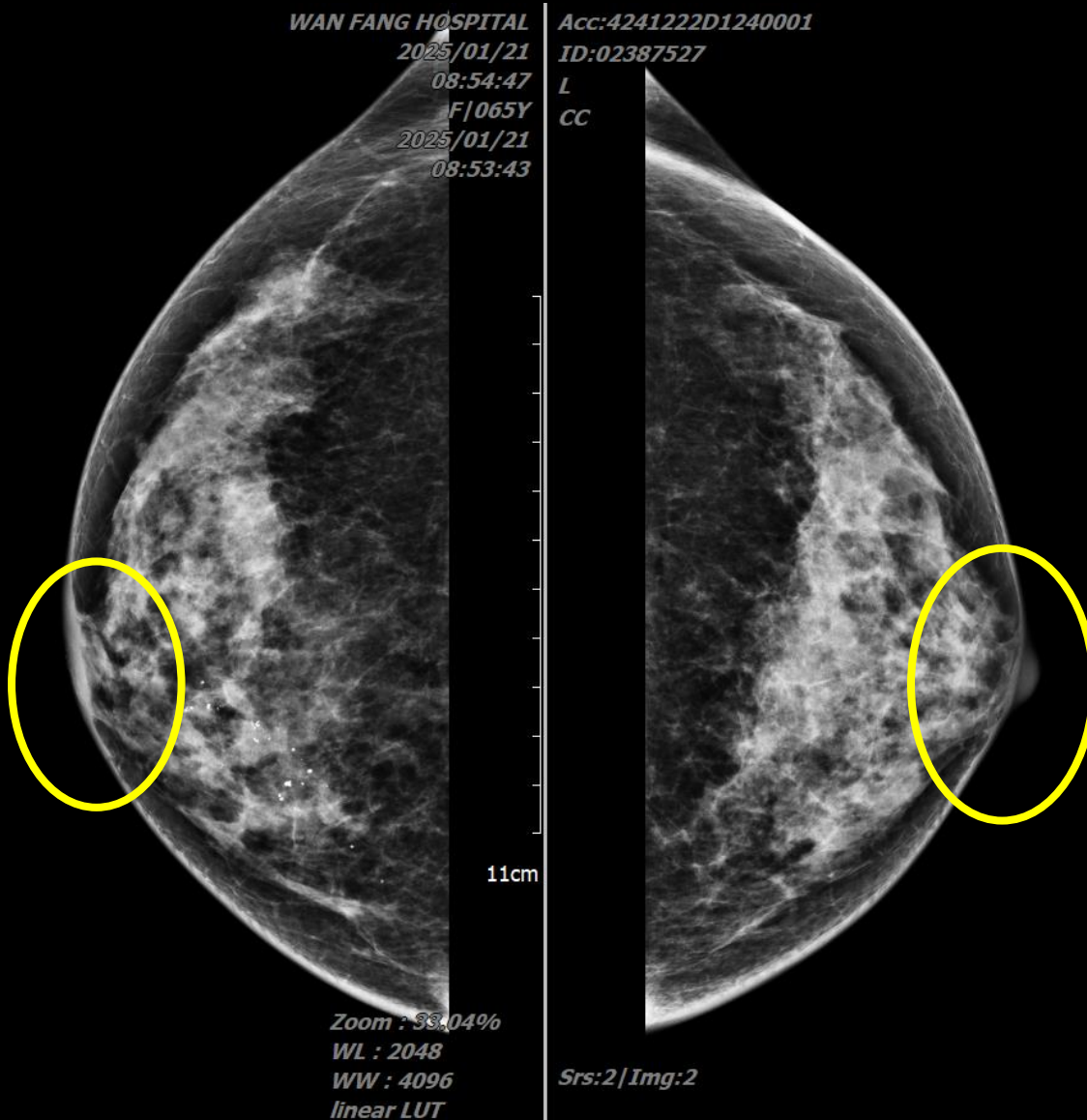


Mammography

2025/1/21

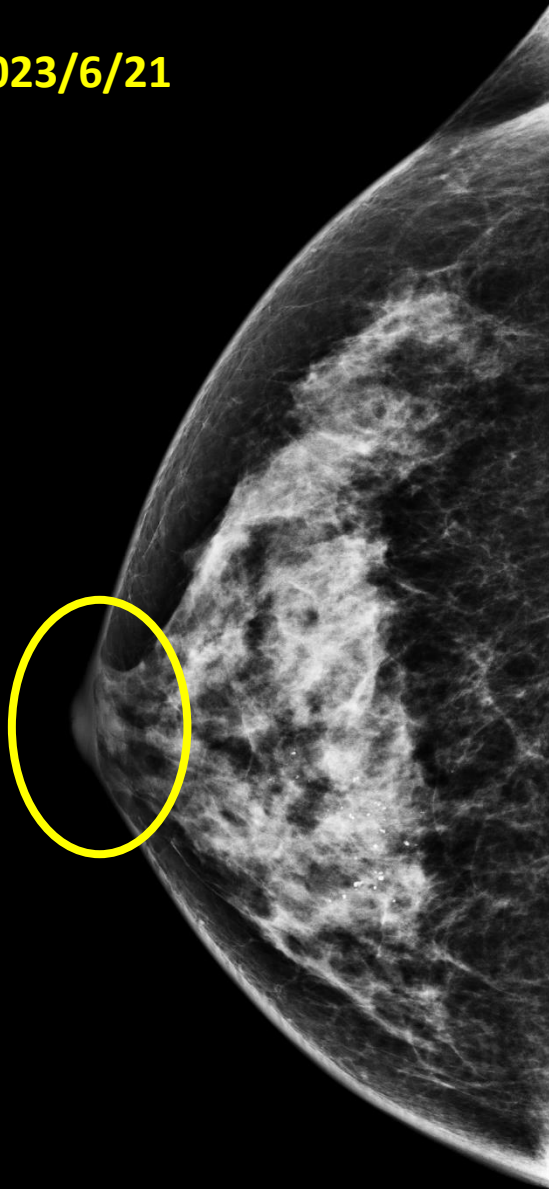
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2025/01/21
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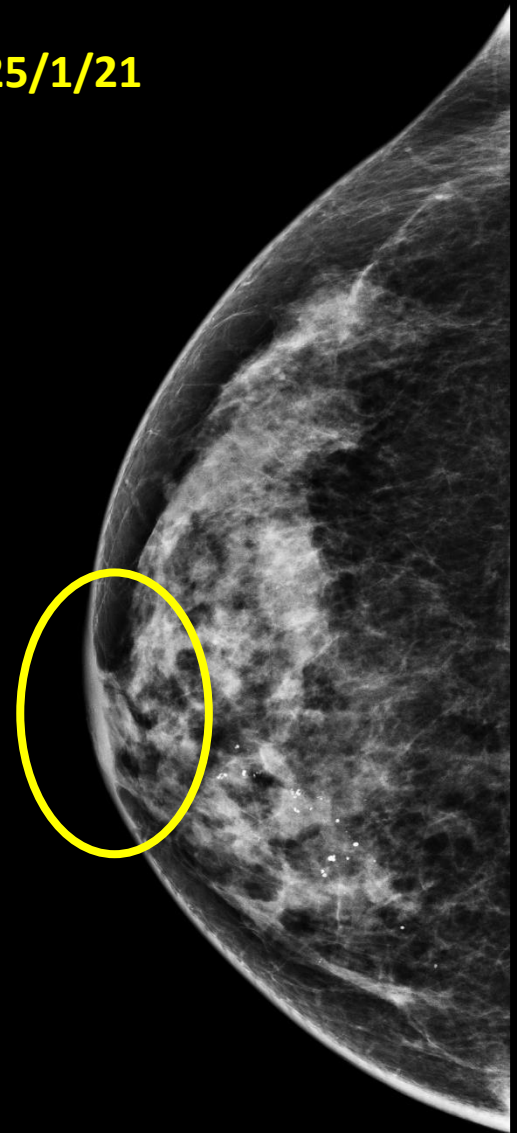


Mammography_RCC

2023/6/21

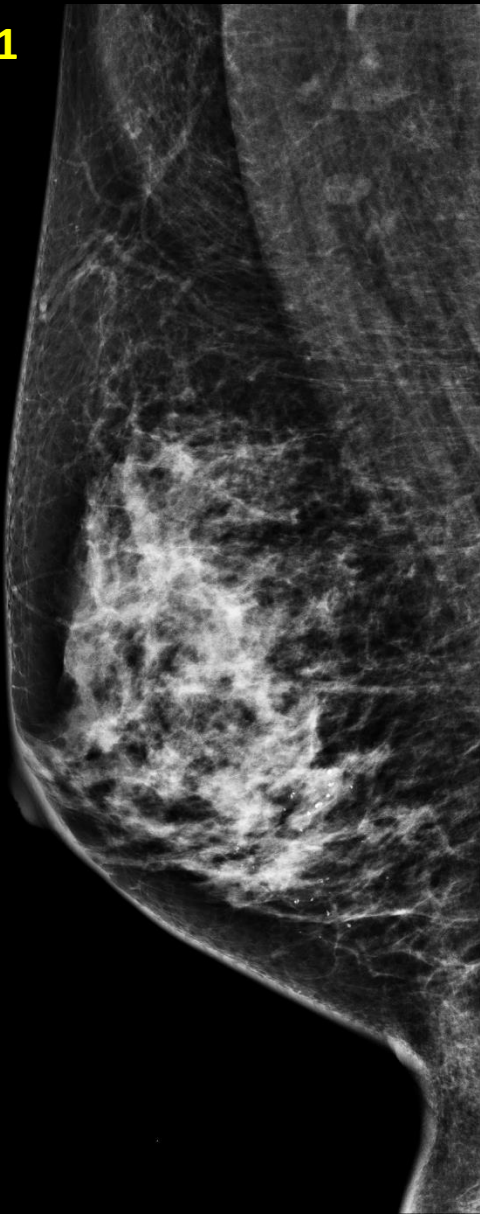


2025/1/21

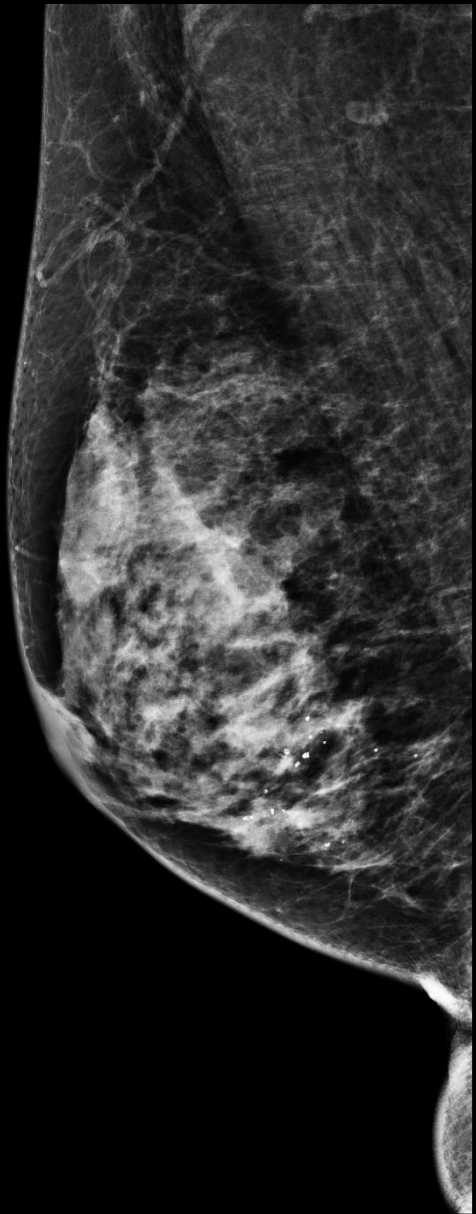


Mammography_RMLO

2023/6/21



2025/1/21



Mammography_RMLO

MG, 鍾韶韻, 02387527, F, 2025-01-21 08:53:43, , Mammography Right+Left, ...

Sex / Age : F / 065Y

Creator : 劉淑怡
Dictator :
Transcriber :
Approver : 劉淑怡
Approver2 : 劉淑怡

Report Date : 2025/01/26 09:06:00
My Comment :

Follow-up mammogram of Bilateral breasts, included CC-view and MLO view:
Radiographer note: Patient claimed right nipple retraction due to eczema a year ago (?)
Findings:

- > The breasts are extremely dense, which lowers the sensitivity of mammography.
- > There are a segmented distributed benign round, rim calcifications in right inner aspect.
- > There is no evidence of suspicious mass or pleomorphic calcifications.
- > Right nipple retraction noted.

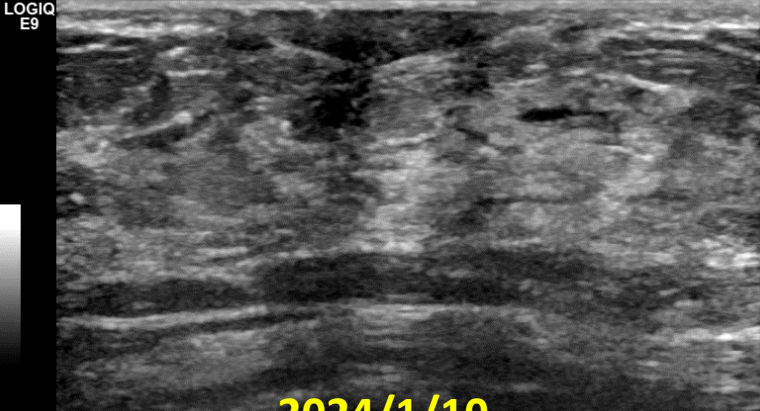
Impression:

1. ACR BI-RADS Category 0: Need additional imaging or prior examinations.
2. Right nipple retraction as compared with previous mammograms (2023/06-2025/01)
3. Advise magnification for further evaluation of segmented calcifications at right inner lower aspect.
4. CAD (computer-assisted detection): Not available.

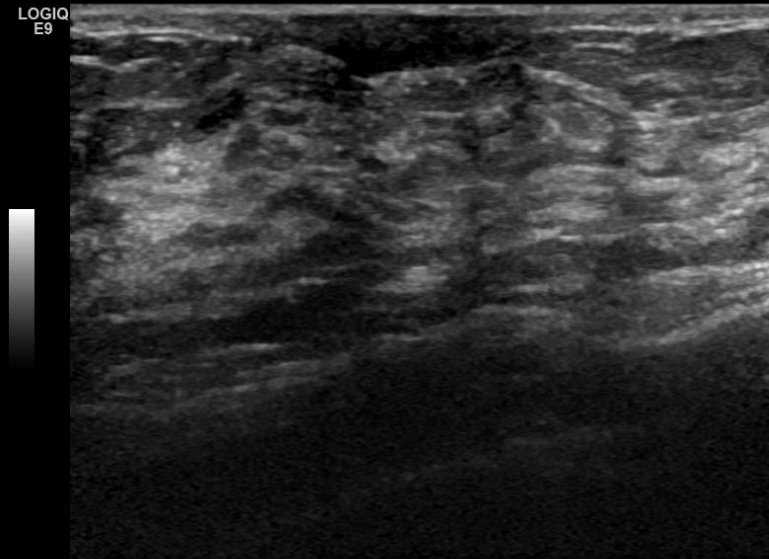
中止 合併 儲存 批准 關閉

Sono_Rt nipple

2023/7/6

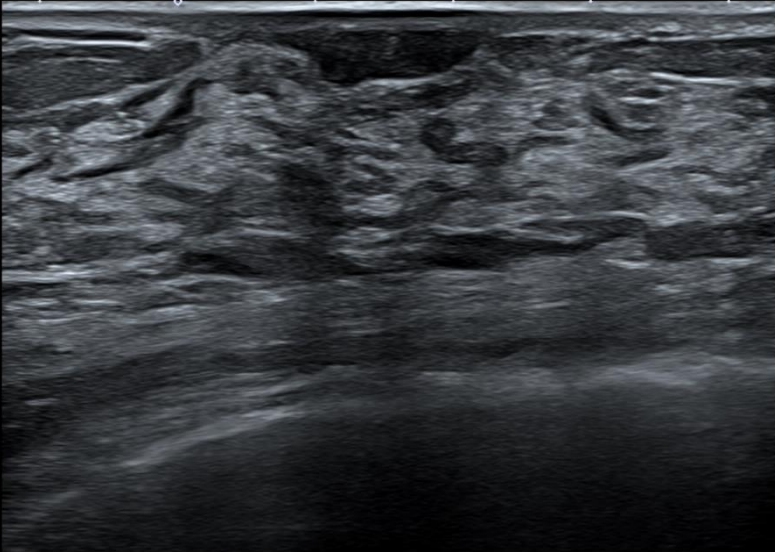


2024/1/10



RT NIPPLE

2025/1/21



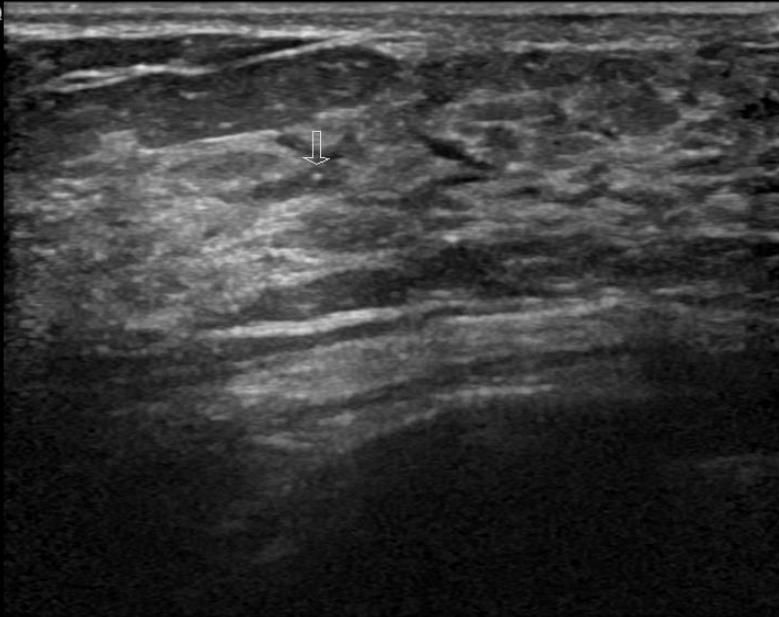
M
(1.4
14L
d11.0
32 fp
Ocean
G:8
DR:7
A:
P:

Rt Nipple

Sono

2023/7/6

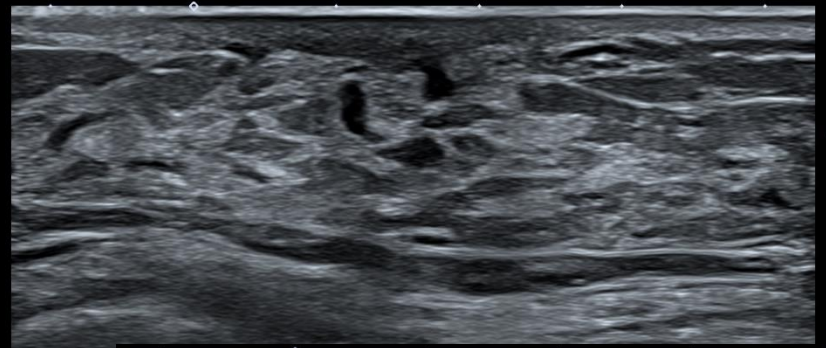
LOGIQ
E9



RT BREAST 8.5/1

2025/1/21

Precision+ A Pure+



MI
(1.4)
14L5
d11.0
32 fps
Qscan
G:84
DR:70

A:3
P:4

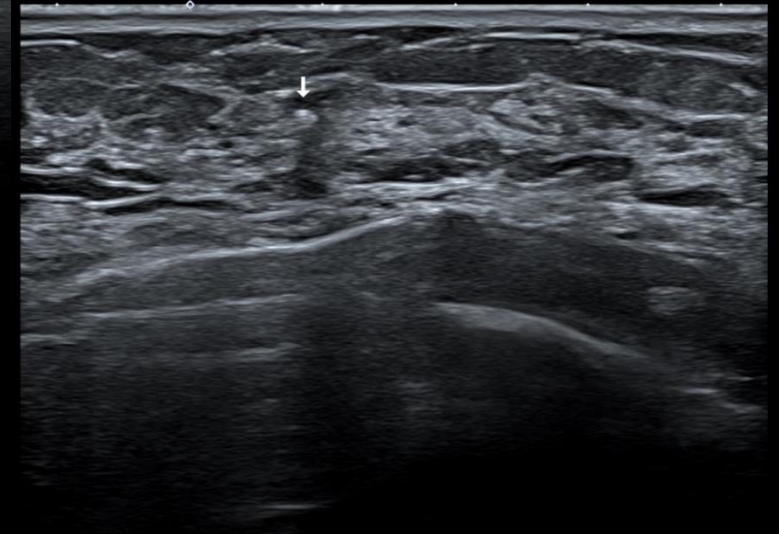
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1

2

3

4



Rt Breast 6.5 / 1

DNR Profile Lab

(02/03) Skin and breast, areolar, right, incisional biopsy, (1) Paget disease of the breast, (2) ductal carcinoma in situ **M**

(2010/02/02) Pap Smear, regular smear

(2008/08/30) Skin, vulva, left, excisional biopsy, fibroepithelial polyp

(2008/08/29) Pap Smear, regular smear

(2007/03/01) Pap Smear, regular smear

(2002/02/04) Ovary and fallopian tube, left, oophosalpingectomy, tubo-ovarian abscess Uterus, corpus, subtotal hysterectomy, adenomyosis Soft tissue, pelvic cavity, near uterine posterior wall, adhesion and inflammation

Approver : 林曉棠
Approver2 : 林曉棠

Report Date : 2025/02/18 14:20:00

My Comment :

Sonography of Bilateral breasts shows:

- > Heterogeneous glandular echogenicity of bilateral breast.
- > Multiple ductal ectasia at bilateral breasts.
- > Calcifications at right 6.5/1, right 6/0.5, right 6.5/4.
- > No enlarged bilateral axillary lymph nodes.

Impression:

1. ACR-BIRADS Category 2: Benign finding.
2. Advise regular follow up within 12 months.

Skin and breast, areolar, right, incisional biopsy, (1) Paget disease of the breast, (2) ductal carcinoma in situ.

Findings:

Breast composition: Heterogeneous background echotexture.

Highly probability suspicious mass: not identified.

Margin: N/A.

Echogenicity: N/A.

Posterior feature: N/A.

Calcifications: N/A.

Associated features: N/A.

Vascularity: N/A..

Elastography: N/A.

Benign or probably masses: as above.

Impression: The skin lesion was nonspecific in this study.

Paget's disease _ survival?

5-year survival rate	MPD	Non-MPD
Over all	93.8%	81.2%
With DCIS		94-98%
With invasive carcinoma		73-93%

Many studies have found that MPD negatively influences breast cancer survival, consistent with its tendency to develop in association with higher-stage disease. Ordz-Pagan conducted a study comparing MPD and non-MPD groups and found that the non-MPD group had an overall 5-year survival rate of 93.8% compared to 81.2% for MPD; however, there was no difference in disease-free survival (DFS) [20]. However, when controlling for HER2/neu status, age, tumor size, nuclear grade, and nodal status, Kothari, et al. reported that individual non-MPD case-controls experienced almost identical overall survival rates as patients with MPD, although the length of follow-up was not specified [10]

~ ~ ~ Q & A ~ ~ ~

