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The Current Difficulties of the Breast Surgeon.

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Head, Breast Centre

•Breast Cancer patients expectations

original article

Annals of Oncology 18: 479–484, 2007
doi:10.1093/annonc/mdl456
Published online 1 February 2007

•617 BC patients

Breast cancer patients' expectations in respect of the physician–patient relationship and treatment management results of a survey of 617 patients

G. Oskay-Özcelik, W. Lehmacher, D. Könsgen, H. Christ, M. Kaufmann, W. Lichtenegger, M. Bamberg, D. Wallwiener, F. Overkamp, K. Diedrich, G. von Minckwitz, K. Höffken, S. Seeber, R. Mirz & J. Sehouli*

Charité Medical University, Augustenburger Platz 1, 13353 Berlin, Germany

•15 min was the median length of the “Breaking Bad News” consultation

•Doctor was the most important source of information

•Yet, 77% patients did “internet-search”

- **Patients would like to get**
 - **More complementary therapies**
 - **More time with their doctors**
 - **More cooperation between their doctors**

•Patients relevant questions

- Am I getting the right treatment?
- How many patients with my condition does my doctor treat?
- Can I be enrolled into a trial?
- Can I have a Second Opinion consultation?

•The word most frequently associated with the disease

- Fear
- Challenge
- Hope
- Opportunity
- Death

- **Breaking bad news**
 - **The Surgeon as a Clinician**

- **The most frequent comments/questions**
 - **Will I be cured?**
 - **I want to “stay clean”**
 - **Will you have to remove the whole breast?**
 - **When will I be operated?**
 - **Will I lose my hair?**

•The most frequent comments/questions

- Will I be cured?

- I want to “stay clean”

- Will you have to remove the whole breast?

- When will I be operated?

- Will I lose my hair?

•Total Mastectomy vs Breast Conserving Treatment

	ANO	n	FU P	MT	CC	CC RT
Institute Gustave Roussy (Sarrazin)	1972	179	10	80		79
Milan (Veronesi)	1973	701	20	59		58
NSABP B-06 (Fisher)	1976	185 1	20	47	xx	46
NCI (Jacobson)	1979	247	10	75		77
EORTC 10801 (van Dongen)	1980	903	10	66		65
Danish Group (Blichert-Toft)	1983	793	20	49		53

• **Breast Conserving Treatment**

- **Is a safe option**

- **Overall Survival rates equivalent to Total Mastectomy**

- **Adjuvant radiotherapy is mandatory**

- **Worse local recurrence rates**

- **Around 10% in 10 years**

- **Breast Conserving Treatment **Contraindications****

- **Inflammatory Breast Cancer**

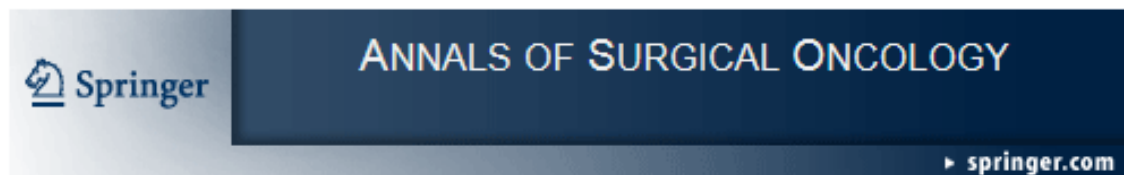
- **Radiotherapy contraindications**

- **Breast Conserving Treatment **Contraindications****
 - **Multicentricity**
 - **Multifocality**
 - **Tumour size vs Breast size**
 - **Pregnancy**
 - **Persistently positive margins**

•Breast Conserving Treatment

- In the USA, BCT rates may be around 45 to 65%
- SEER shows TM decreasing rates from 41% (2000) to 37% (2006).
- In England (2008): 58%
- At HSJ (2014): 54.3%

- **Breast Conserving Treatment**
- **Positive margins and Re-operation**
 - **Reexcision is necessary in around 20% of BCT**



Ann Surg Oncol. 2008 May; 15(5): 1271–1272.

Published online 2008 Mar 5. doi: [10.1245/s10434-007-9766-0](https://doi.org/10.1245/s10434-007-9766-0)

PIV

Positive Margins: The Challenge Continues for Breast Surgeons

[Lisa Jacobs](#)[✉]

•Breast Conserving Treatment

BMJ

BMJ 2012;345:e4505 doi: 10.1136/bmj.e4505 (Published 12 July 2012)

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•Positive margins and Re-operation

RESEARCH

Reoperation rates after breast conserving surgery for breast cancer among women in England: retrospective study of hospital episode statistics

•55297 patients BCT

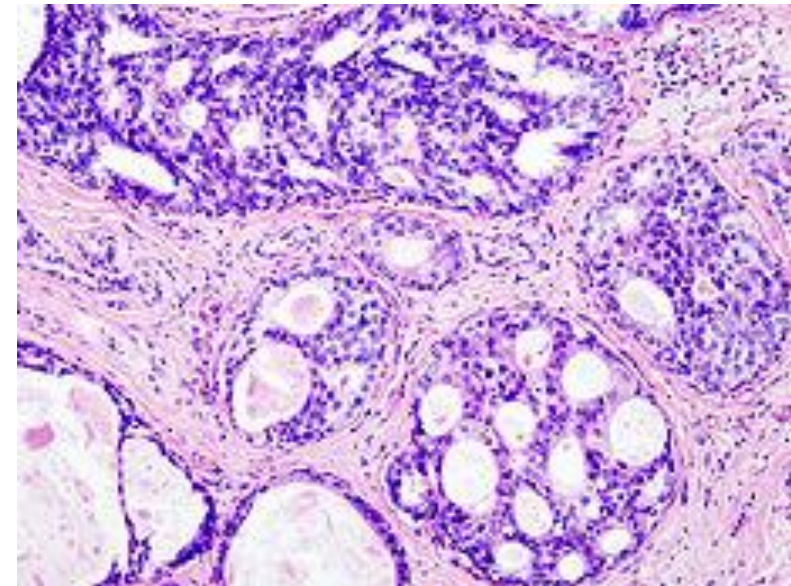
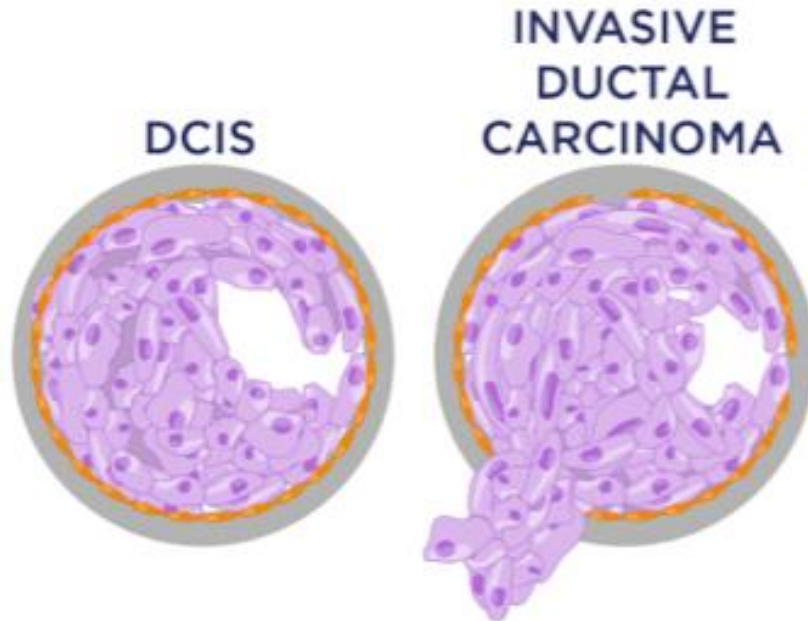
•Reexcision was done in 20% of cases

•Unifocal invasive tumour: 18%

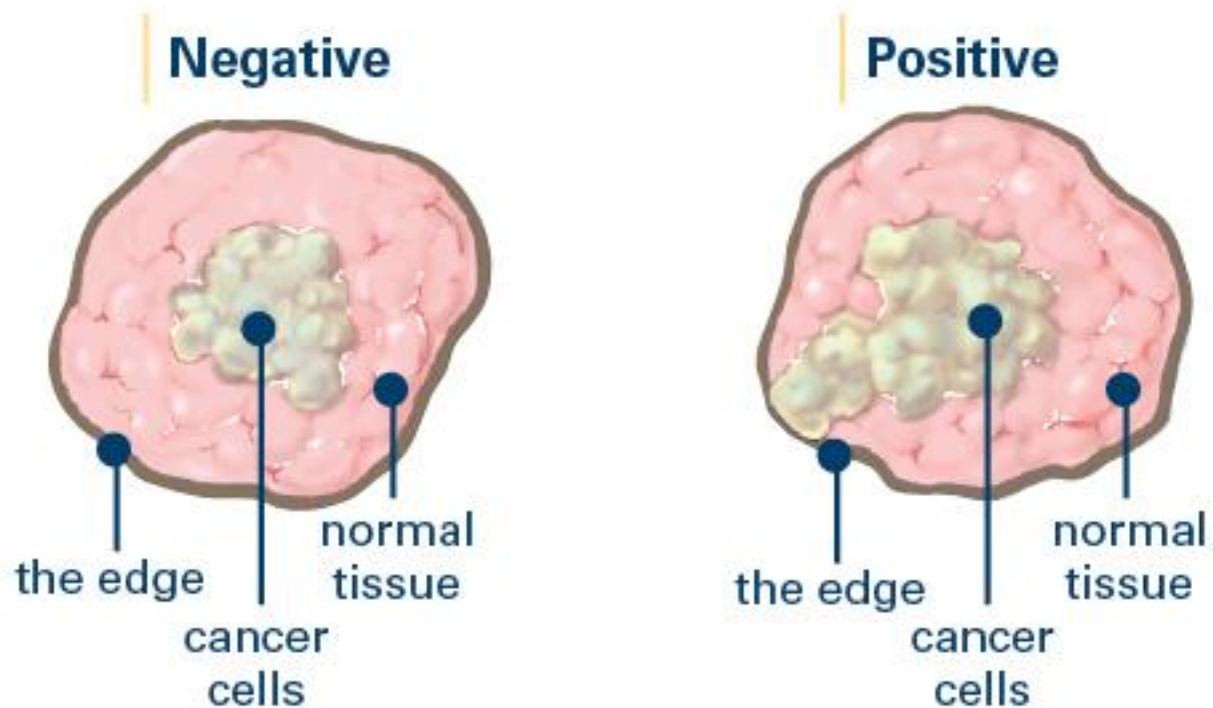
•Any form of DCIS present: 29.5%

- **Breast Conserving Treatment**
- **Positive margins and Re-operation**
 - **At HSJ (2014): 13.7%**


•Margin definition (DCIS)



•Margin definition



•Margin definition (DCIS)

 National Comprehensive Cancer Network®
NCCN Guidelines Version 3.2014
Ductal Carcinoma in Situ

[NCCN Guidelines Index](#)
[Breast Cancer Table of Contents](#)
[Discussion](#)

MARGIN STATUS IN DCIS

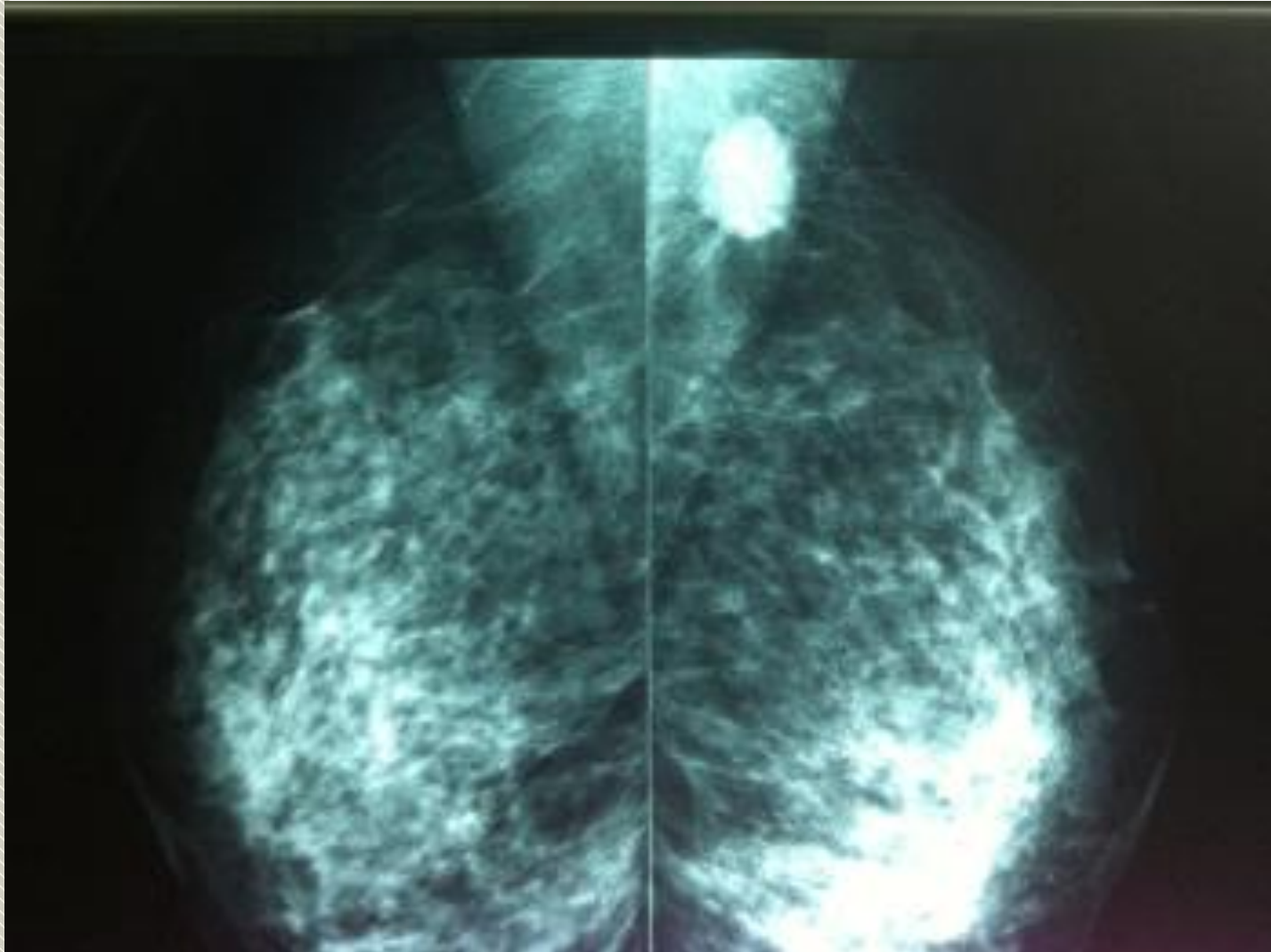
Substantial controversy exists regarding the definition of a negative pathologic margin in DCIS. Controversy arises out of the heterogeneity of the disease, difficulties in distinguishing the spectrum of hyperplastic conditions, anatomic considerations of the location of the margin, and inadequate prospective data on prognostic factors in DCIS.

Margins greater than 10 mm are widely accepted as negative (but may be excessive and may lead to a less optimal cosmetic outcome).

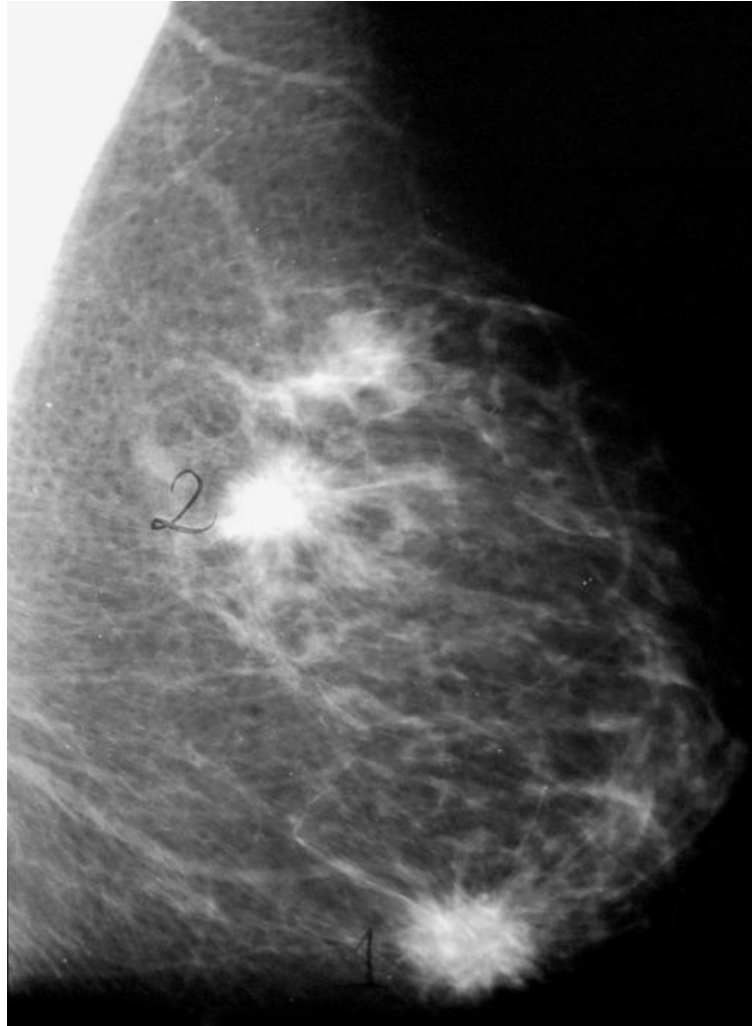
Margins less than 1 mm are considered inadequate.

With pathologic margins between 1-10 mm, wider margins are generally associated with lower local recurrence rates. However, close surgical margins (<1 mm) at the fibroglandular boundary of the breast (chest wall or skin) do not mandate surgical re-excision but can be an indication for higher boost dose radiation to the involved lumpectomy site (category 2B).

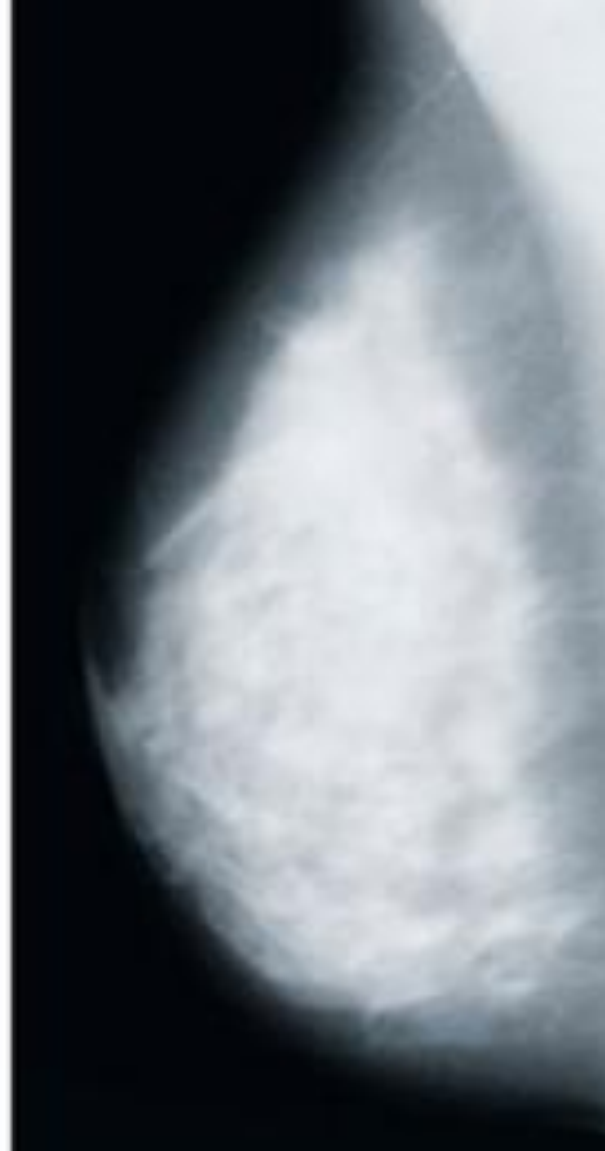
The Current Difficulties of the Breast Surgeon.



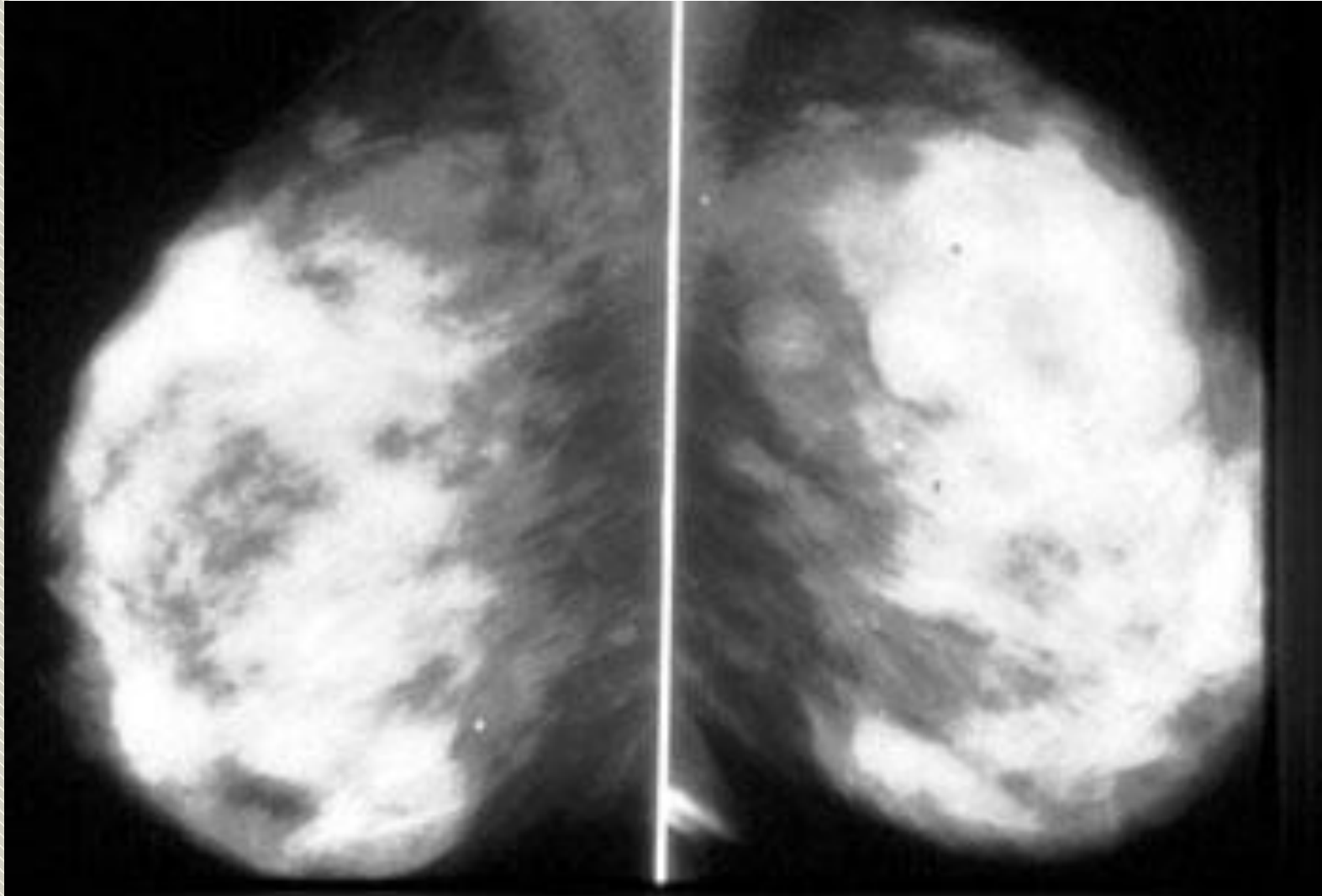
•Breast Conserving Treatment



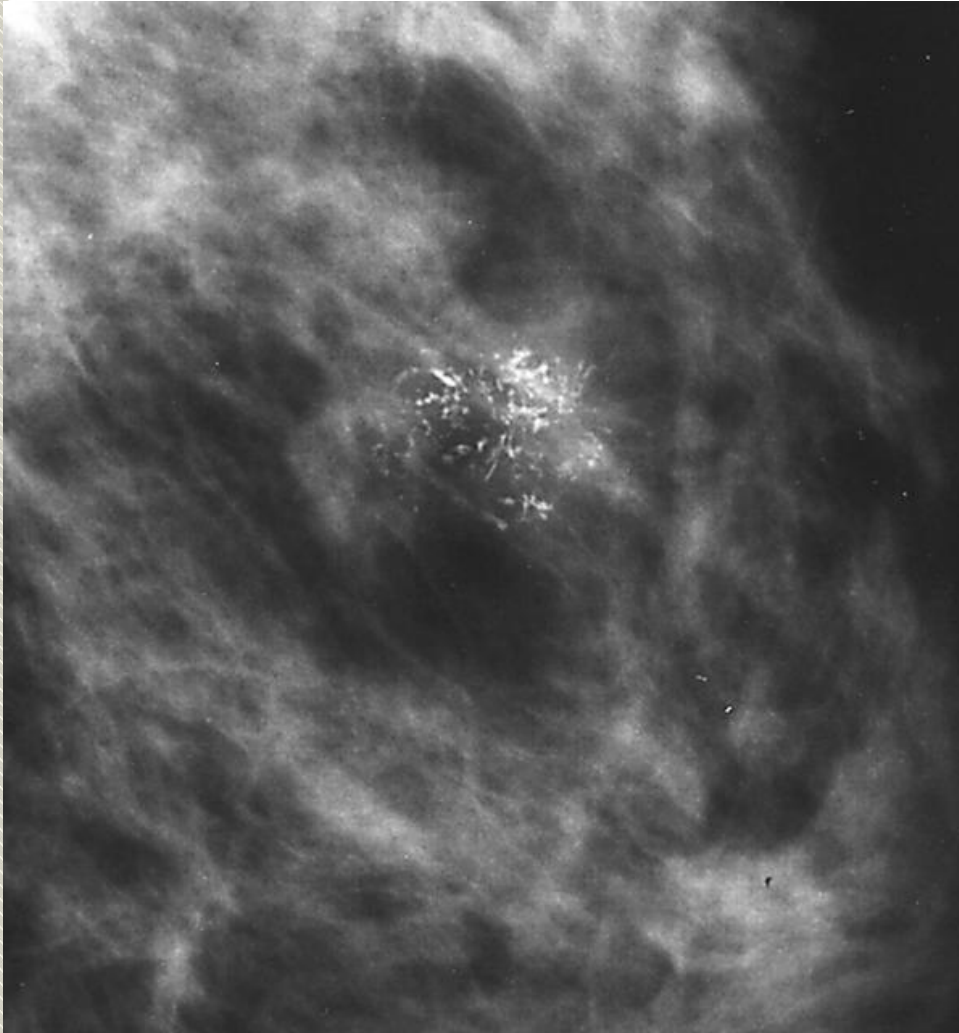
The Current Difficulties of the Breast Surgeon.



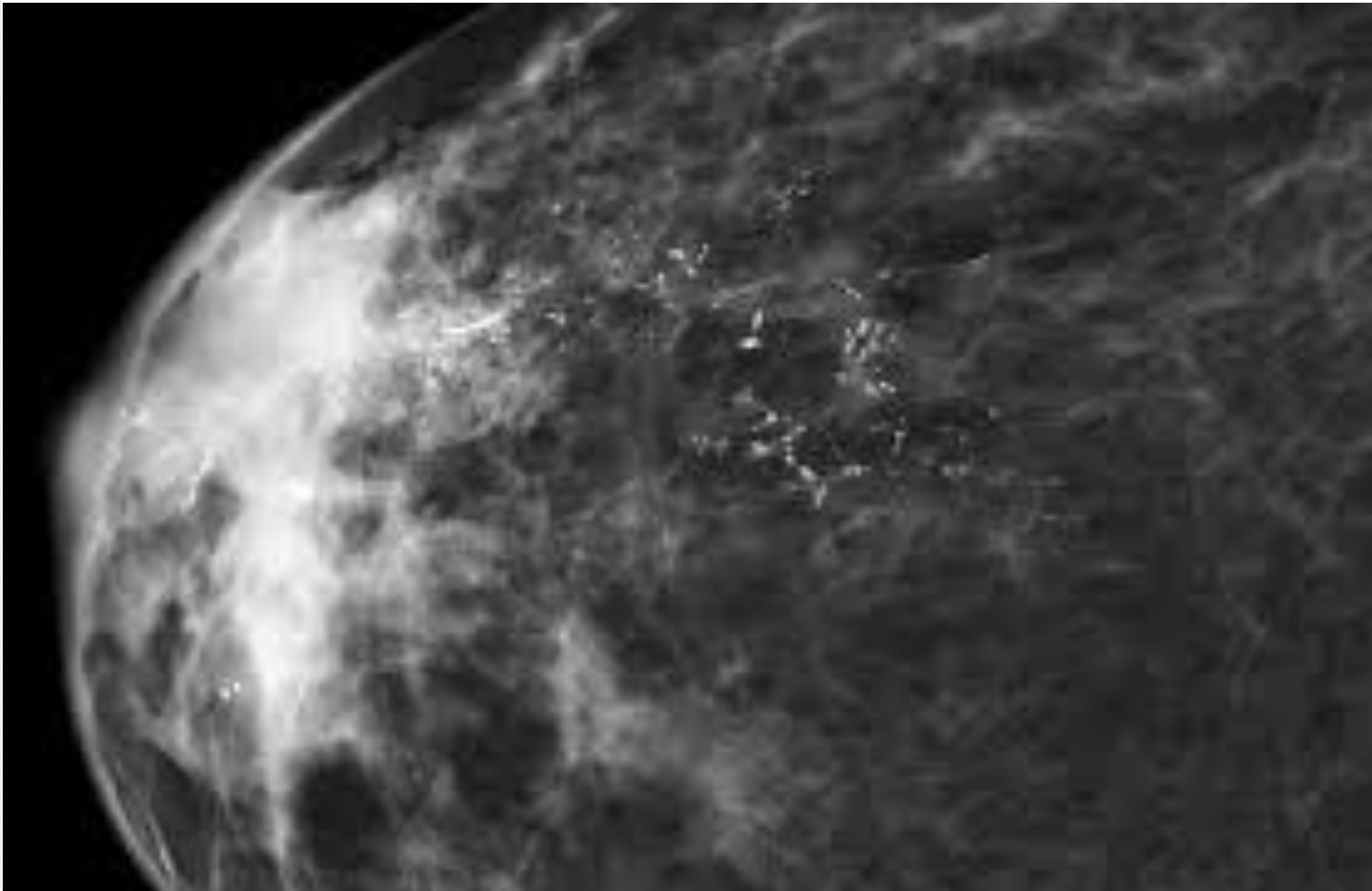
The Current Difficulties of the Breast Surgeon.



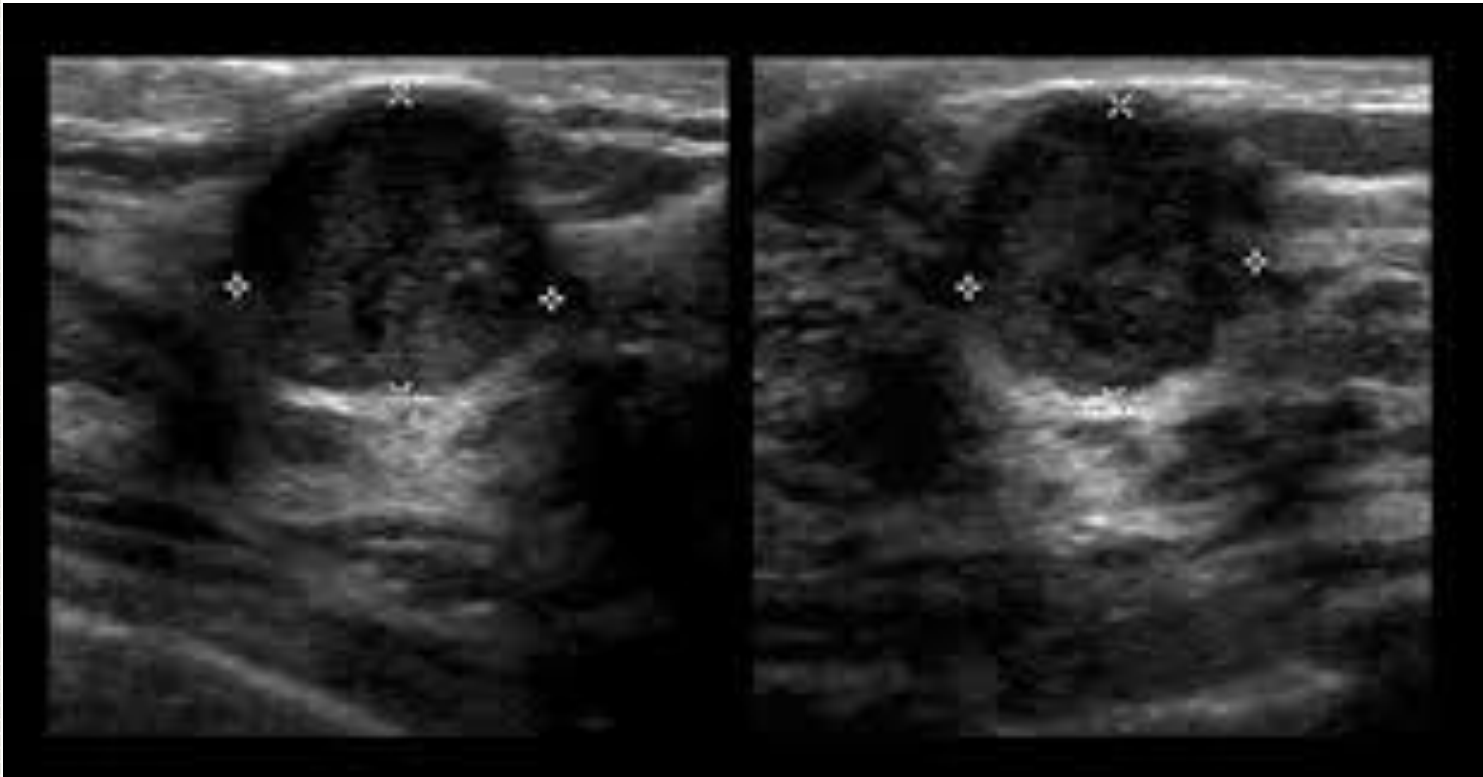
•Breast Conserving Treatment



•Breast Conserving Treatment



•Ultrasound imaging



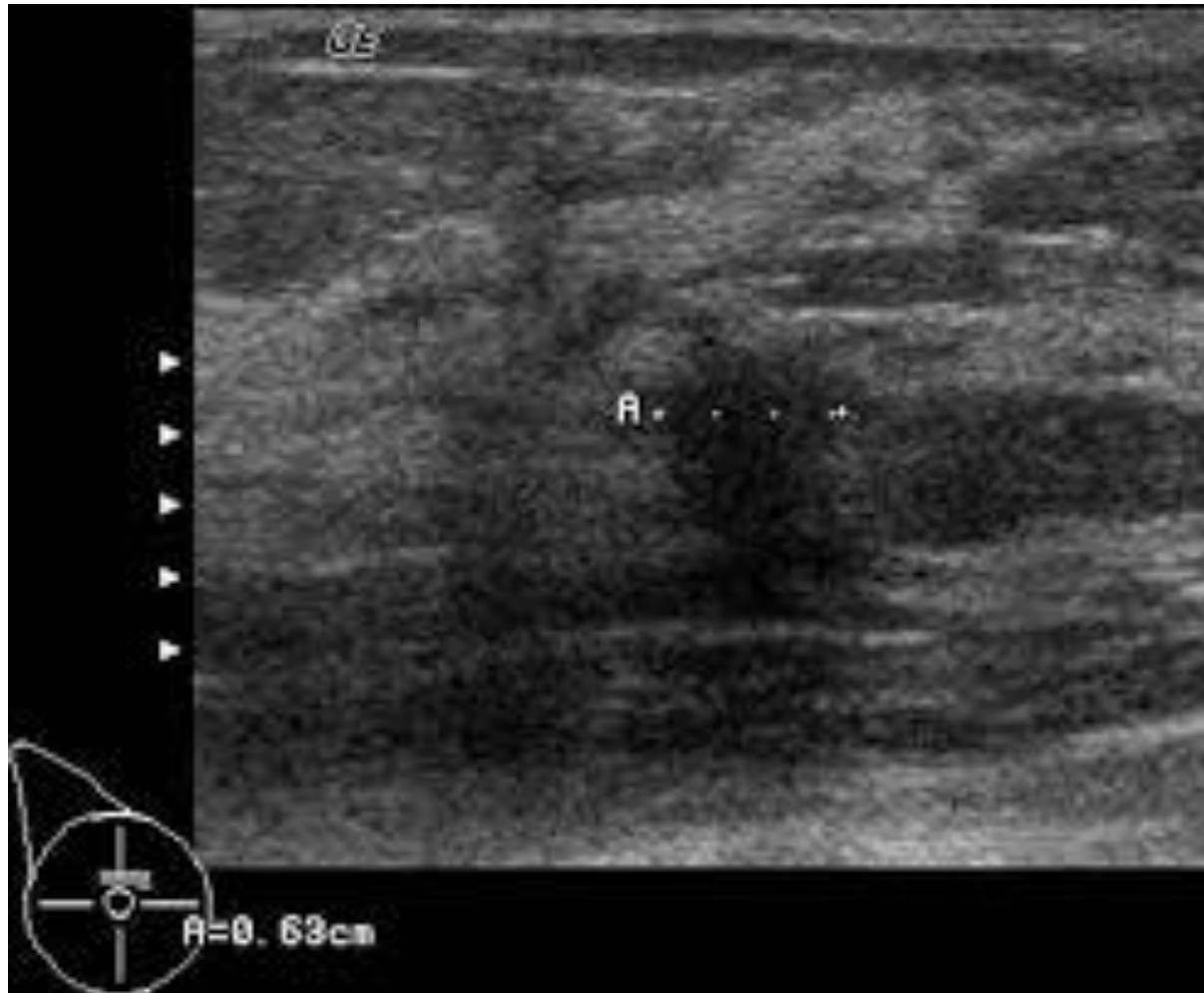
•Ultrasound imaging



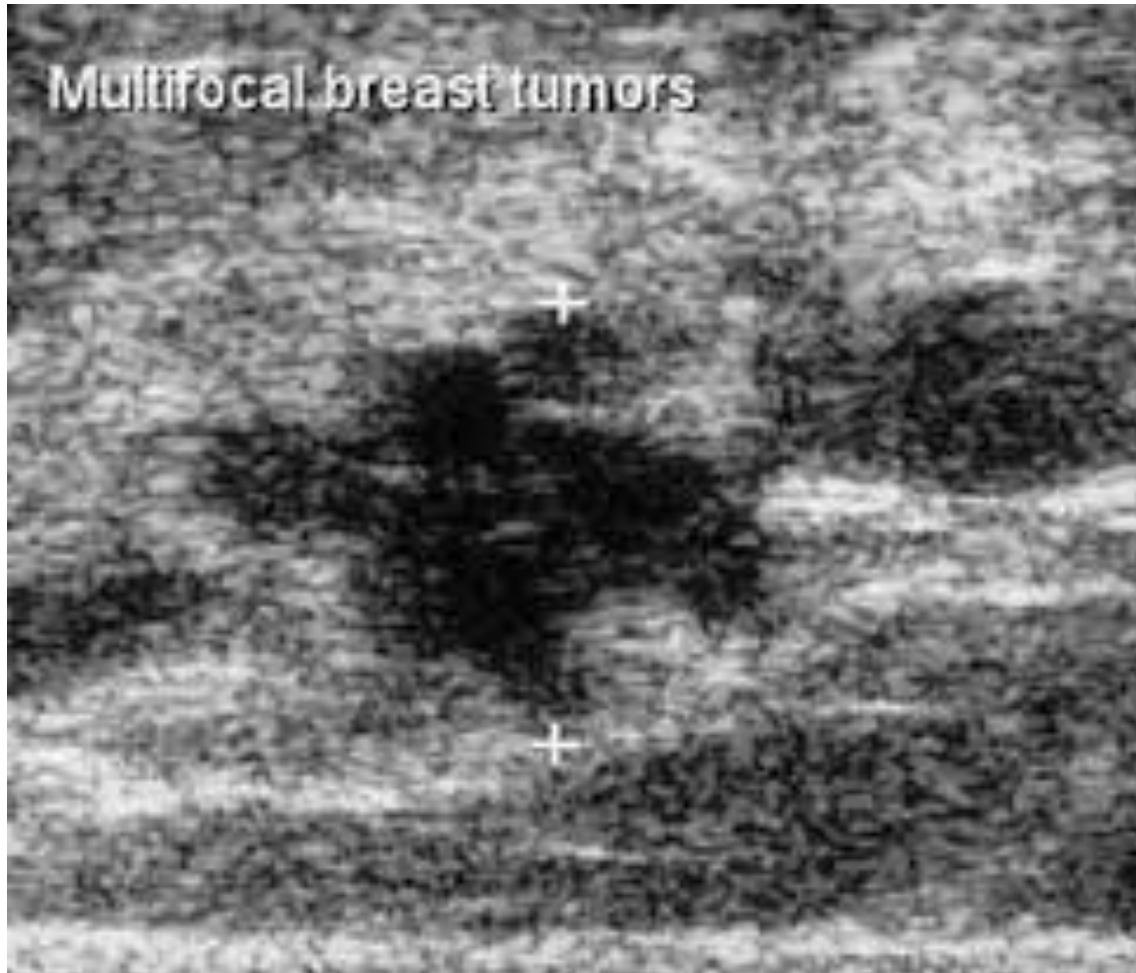
•Ultrasound imaging



•Ultrasound imaging



•Ultrasound imaging



•Breast Conserving Treatment

•Excessive resection

The Breast Journal

ORIGINAL ARTICLE

Excessive Resections in Breast-Conserving Surgery A Retrospective Multicentre Study

Nicole Krekel, MD,* Barbara Zonderhuis, MD,* Sandra Muller, MD,*
Herman Bril, PhD,[†] Henk-Jan van Slooten, PhD,[‡] Elly de Lange de Klerk, PhD,[§]
Petrousjka van den Tol, PhD,* and Sybren Meijer, PhD*

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The Breast Journal, Volume 17 Number 6, 2011 602-609



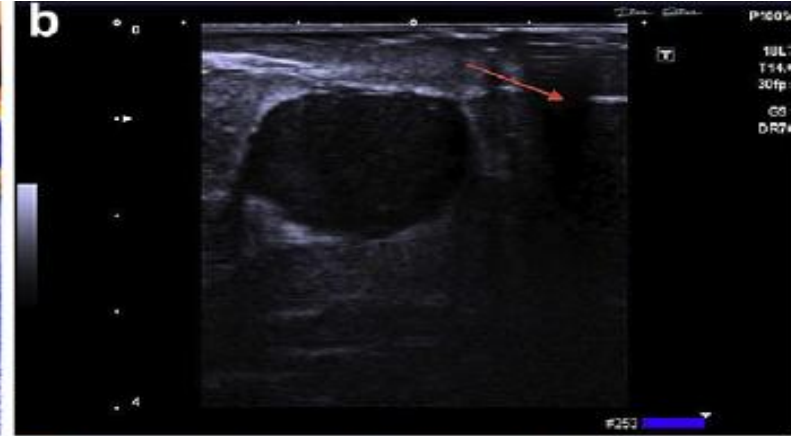
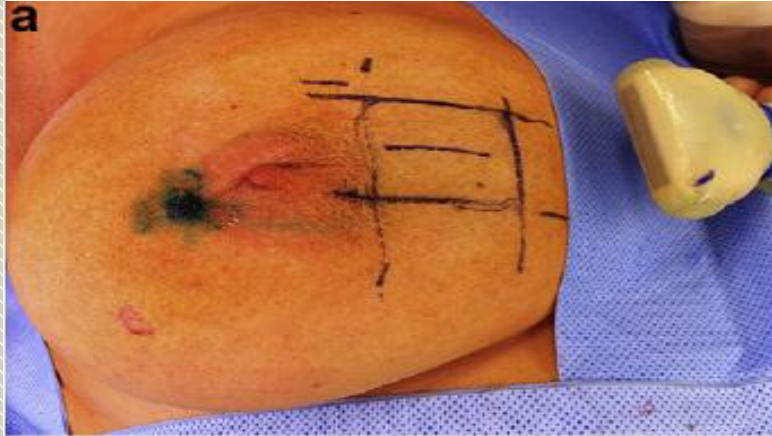
(a)



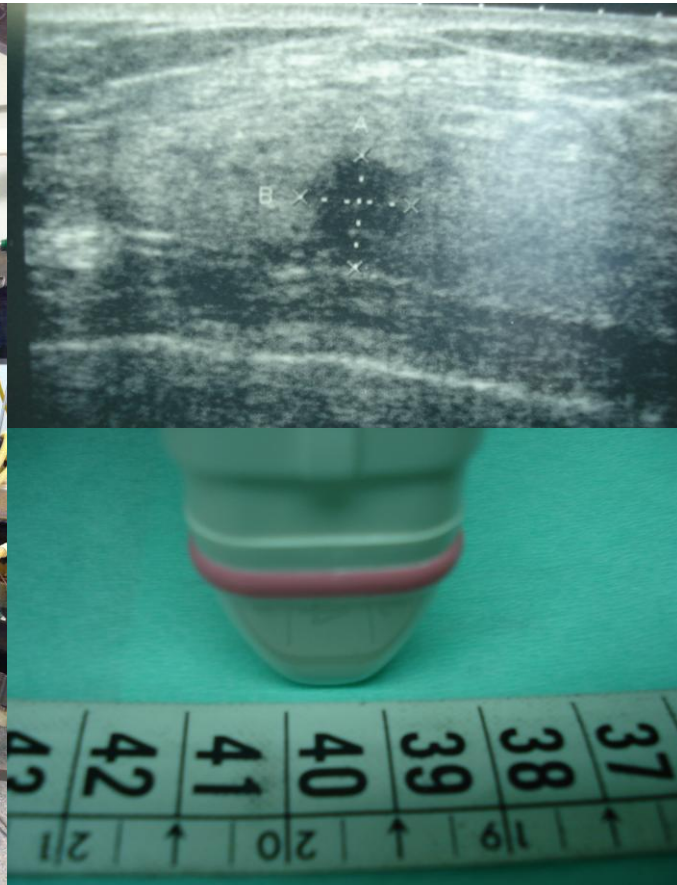
(b)

•Breast Conserving Treatment

•Excessive resection



- Breast Conserving Treatment
- Ultrasound guidance



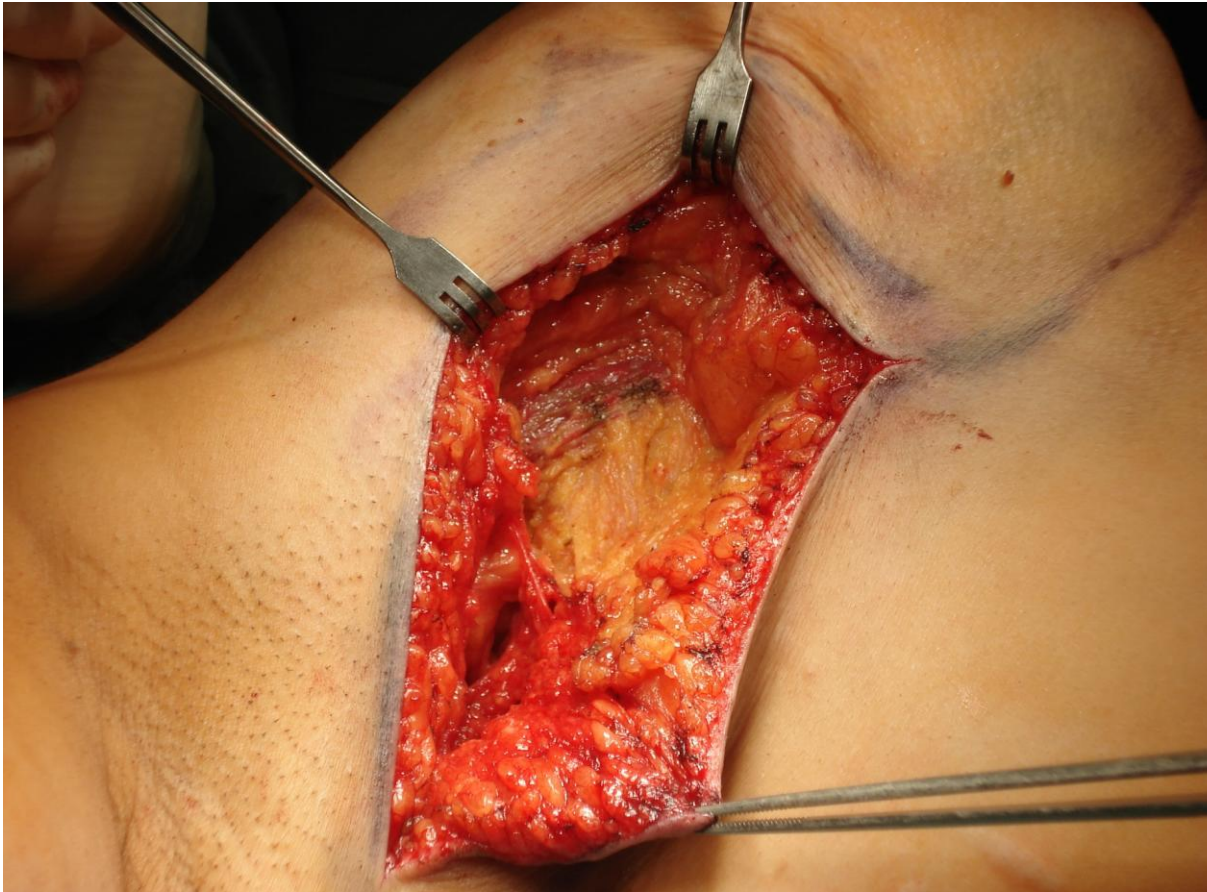
- **Breast Conserving Treatment**
- **Ultrasound guidance**



- **Breast Conserving Treatment**
- **Ultrasound guidance**



- **Breast Conserving Treatment**
- **Ultrasound guidance**

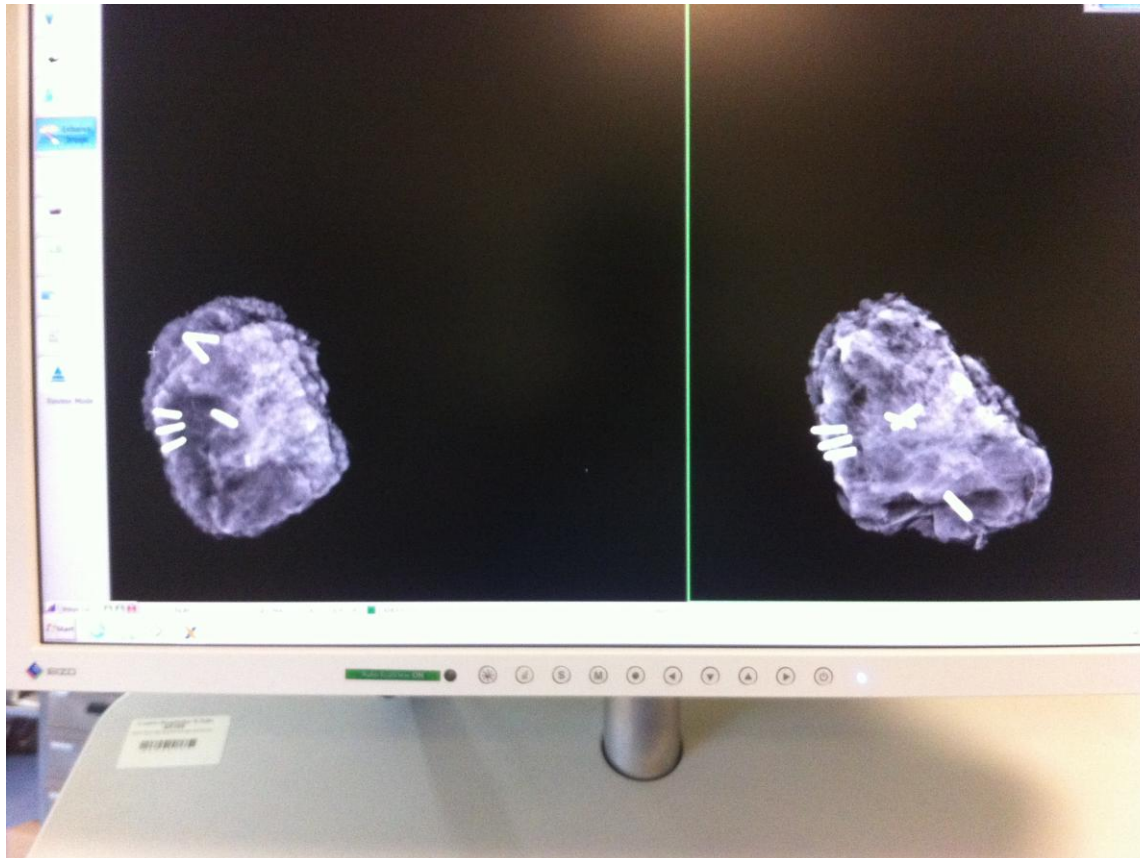


- **Breast Conserving Treatment**

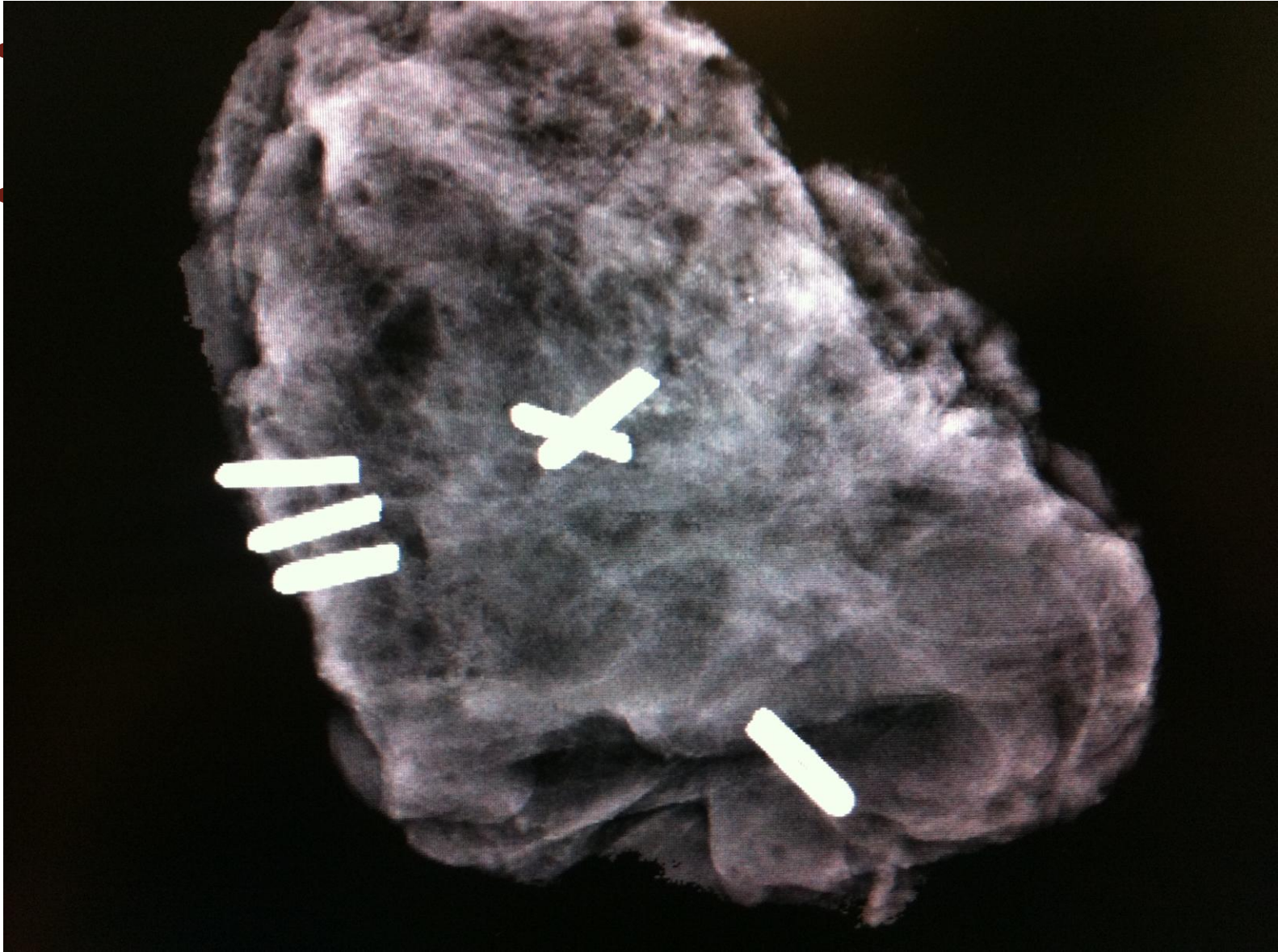
- **Ultrasound guidance**



- **Breast Conserving Treatment**
- **Margin assessment**



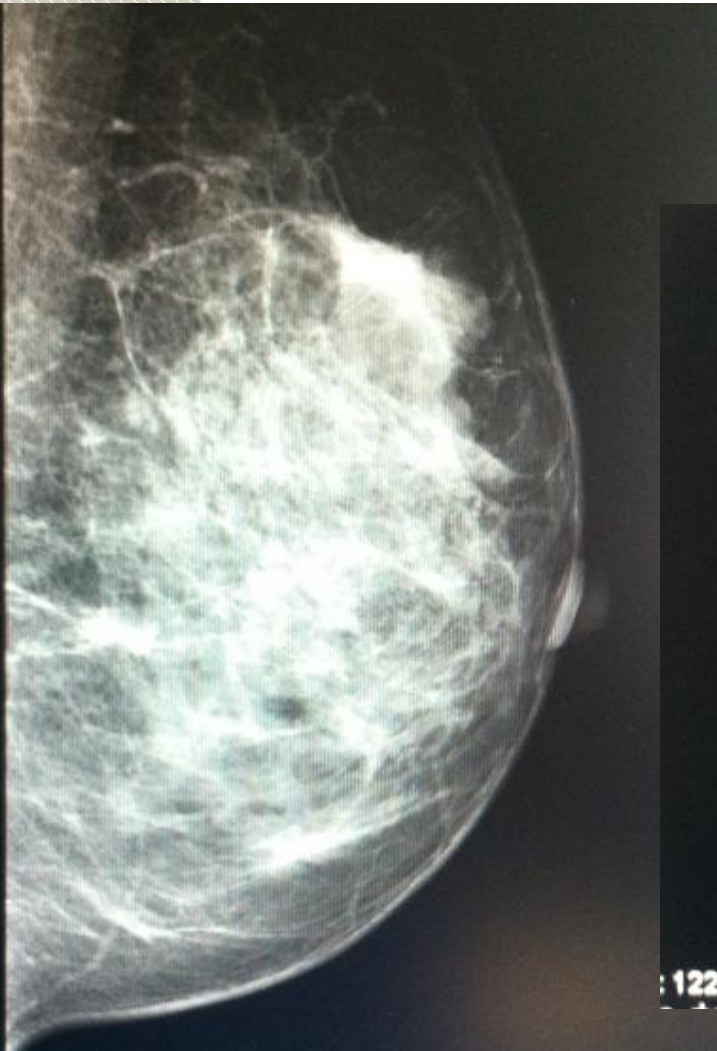
The Current Difficulties of the Breast Surgeon.



- **Breast Conserving Treatment**
- **Margin assessment**



•Breast Conserving Treatment



- **Breast Conserving Treatment**
- **The Magnetic Resonance Imaging of the breast**
 - **Excellent sensitivity (close to 100%)**
 - **Precise definition of size and extent of the tumour**
 - **Identification of multicentricity, multifocality, contralateral disease**

- **Breast Conserving Treatment**
- **The Magnetic Resonance Imaging of the breast**
 - **It should be part of the pre-operative planning**

- **Breast Conserving Treatment**
- **The Magnetic Resonance Imaging of the breast**
 - **Lower rates of specificity**
 - **Higher rates of false-positives**
 - **More Total Mastectomies**
 - **More 2nd look ultrasound and biopsies**
 - **Costs**



Basic Expanded

Preoperative MRI

Microcalcifications

Preoperative N-stage

Preoperative T-stage

Density

Palpability

Suspicion of multifocality

Calculate Clear Print

Patient and tumor characteristics

Basic Expanded

No

Present

Negative

T₁

50-75%

Palpable

Yes

Calculate Clear Print

Estimated risk for positive surgical margins:

Predicted probability: 45%

Interpretation:

If there would be a group of 100 patients with the same characteristics as this individual patient, 45 patients are expected to have positive surgical margins after breast-conserving therapy.

Based on an a priori risk of approximately 20% in the general population, this particular patient has a **high risk** of positive surgical margins.

Due to the fact that the model is only an approximation of the true situation, the estimated risk may deviate from the actual risk for positive surgical margins.

Risk definitions:

Low risk: < 15%

Intermediate risk: 15% - 25%

High risk: > 25%

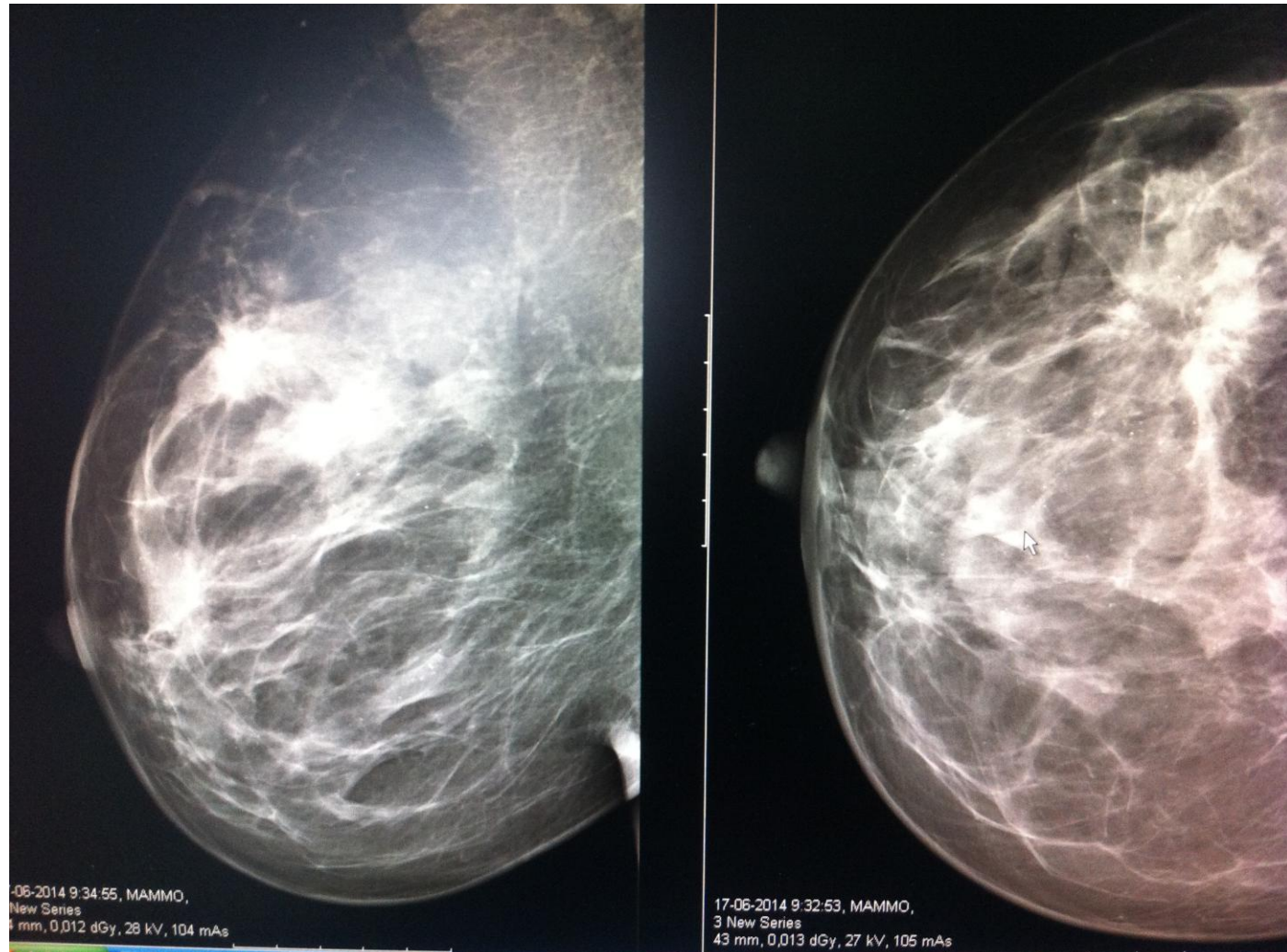
- **Unfavorable Tumour/Breast ratio**
- **Locally advanced tumour**
- **Indication for Systemic Chemotherapy**
- **Unfavorable Molecular Subtypes (TN, Her2+)**
- **Consider Neo Adjuvant Chemotherapy**

- **NA ChT**
- **MRI before NA ChT**
- **Metal clip inside tumour**
- **Black Tattoo around tumour**
- **MRI after NA ChT**
- **Breast conserving ratio (2007-12): 61%**
- **Re-operation ratio: 8%**
- **cPR: 29%**

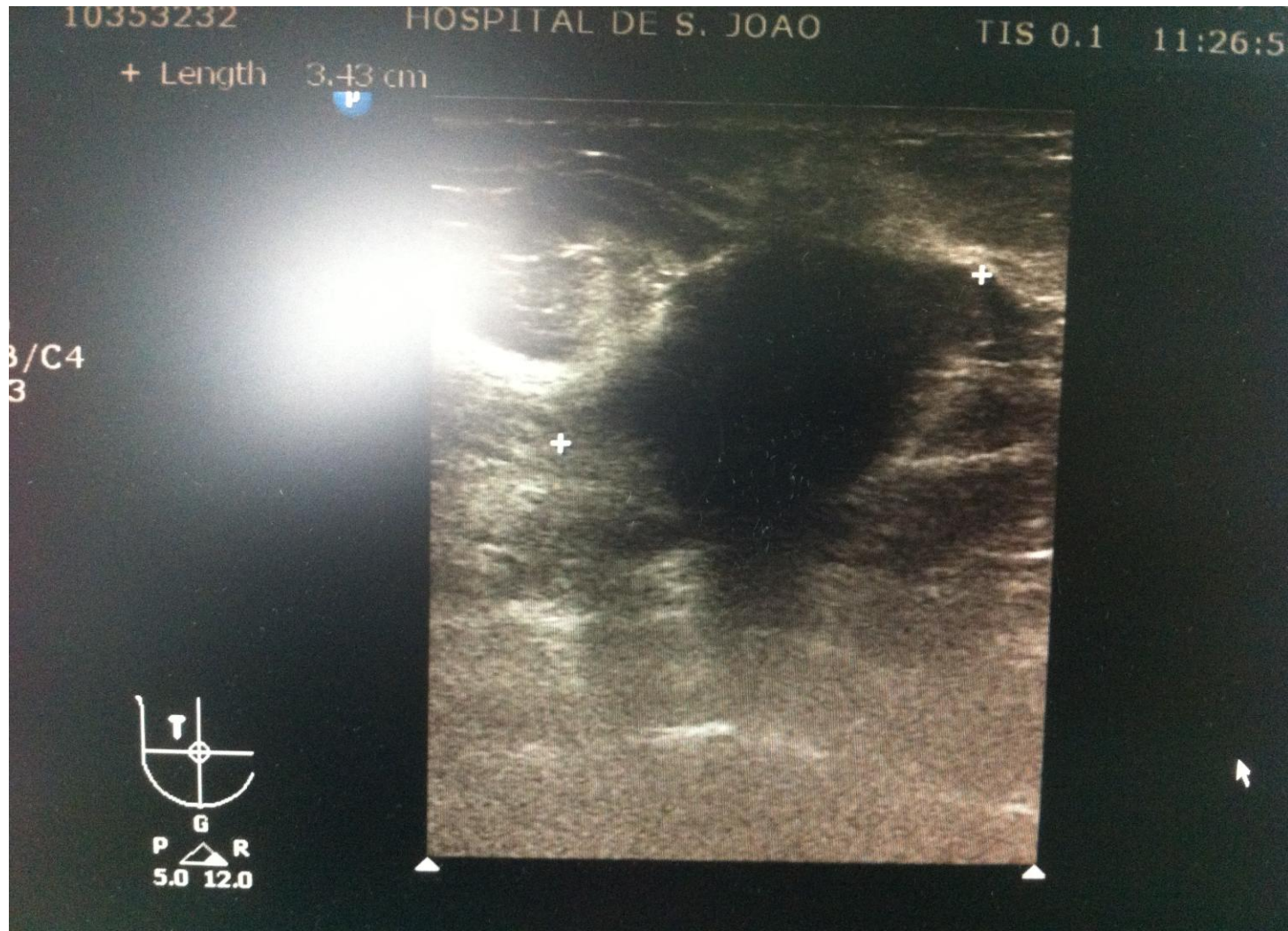
•NA ChT



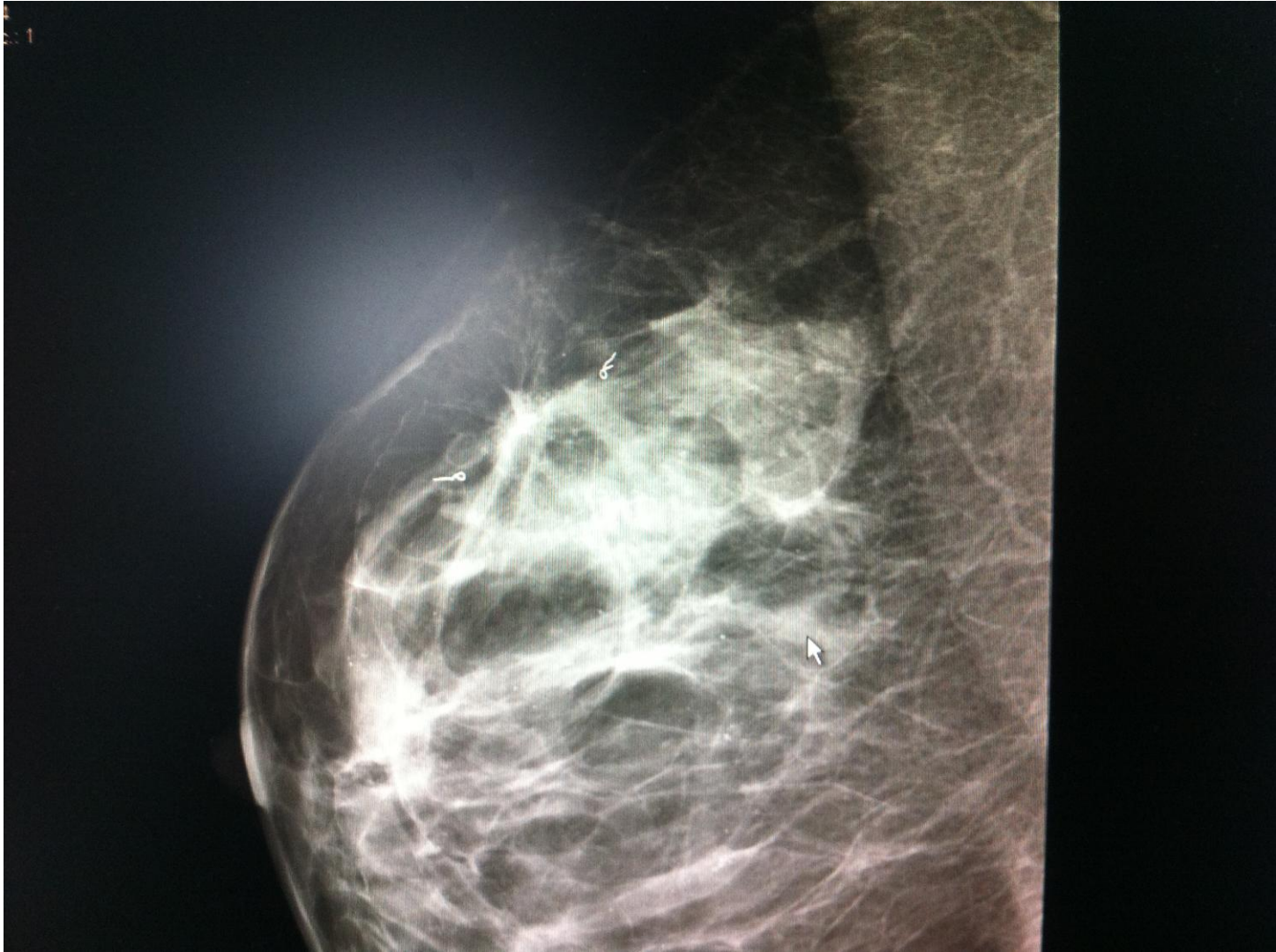
•NA ChT



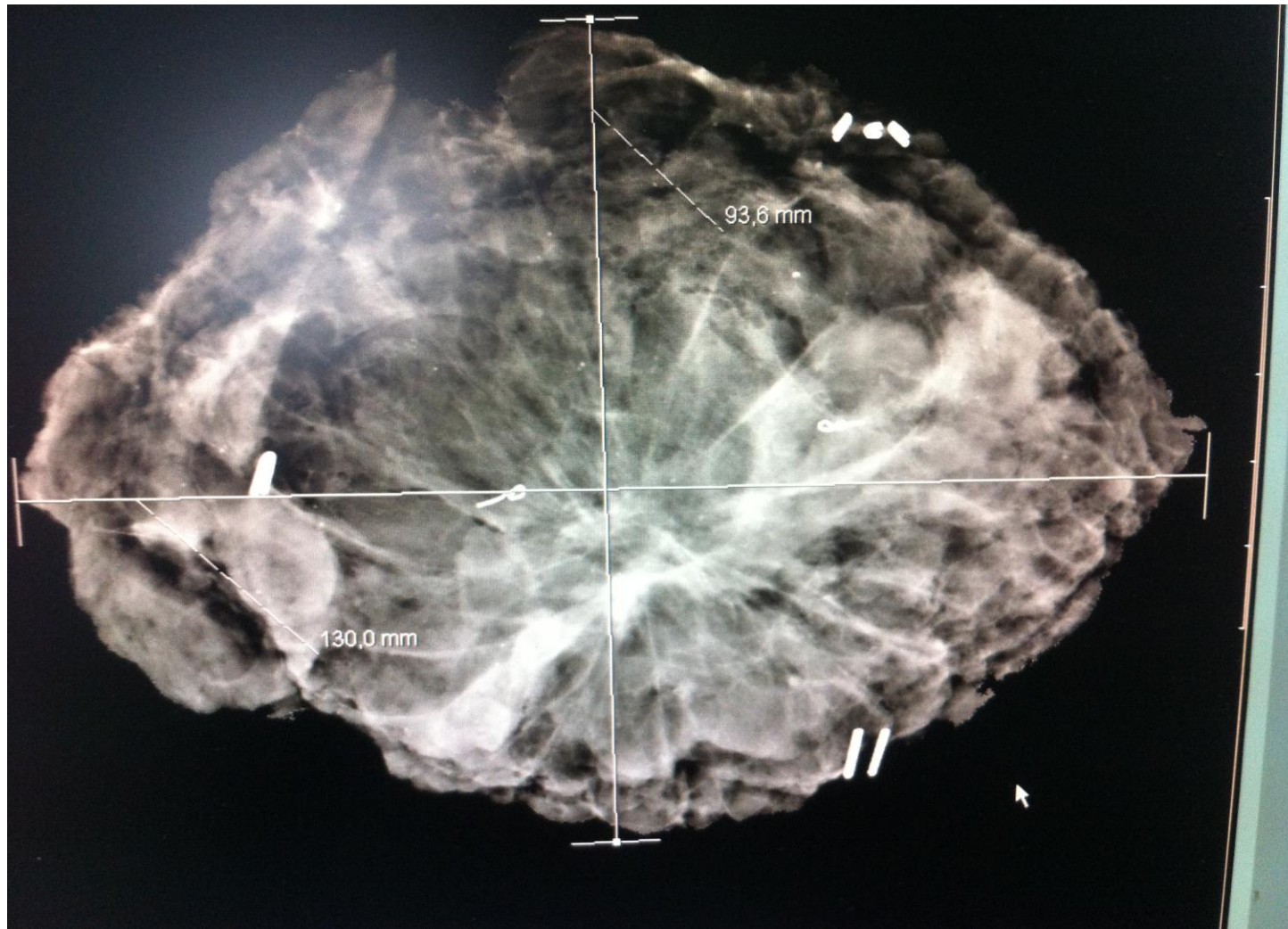
•NA ChT



•NA ChT



•NA ChT



•NA ChT



- **Future insights**

- **To better plan the surgery**

- **Imaging very small tumour foci (<2 mm) in a functional way**

- **To operate patients only once**

- **Availability inside the OR**



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Obrigado pela vossa atenção!

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