

fine needle aspiration as part of the triple diagnostic procedure. Non-conclusive or non-representative triple test results were reason to perform a histological core needle biopsy. Malignant lesions, non-conclusive and non-representative histology of the core needle biopsy and suspected lesions, that did not undergo one of the previous diagnostic procedures underwent an excisional biopsy. This excisional biopsy and 1 year follow up was used as standard for reference.

The performance of the diagnostic modalities were described in an inconclusive rate, sensitivity and specificity, and area under the receiver operating characteristic curve.

Results: From October 1999 till August 2000, 2020 patients underwent physical examination of the breasts and imaging. In 271 suspicious palpable breast lesions additional diagnostic procedures were indicated. Fine needle aspiration was performed in 241 lesions. Histological core needle biopsy was performed in 70 cases. 191 palpable breast lesions were surgically excised. See Table 1.

Conclusion: The diagnostic performance of the histological core needle biopsy as a less invasive diagnostic modality seems better compared to the triple diagnostic procedure, including fine needle aspiration cytology. Whether we should abandon the triple diagnostic procedure all together is uncertain. Probably there is some place for better-defined indications about the previous diagnostic results and some characteristics of the lesion about palpability.

Table 1

| | Inadequate rate | Sensitivity | Specificity | AUC-ROC |
|---------------------------------|-----------------|-------------|-------------|---------|
| Fine needle aspiration cytology | 0.12 | 0.81 | 0.74 | 0.95 |
| Triple test | 0.20 | 0.85 | 0.12 | 0.76 |
| Histological core needle biopsy | 0.06 | 0.95 | 0.87 | 0.95 |
| Diagnostic excision | 0.00 | 1.00 | 1.00 | 1.00 |

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POSTER

Impact of introducing a preoperative vacuum assisted biopsy on the surgical outcome of suspicious microcalcifications

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Purpose: To evaluate whether a preoperative vacuum assisted biopsy (VAB) for suspicious microcalcifications reduces open biopsies for benign lesions and reduces the re-excision rate.

Materials and methods: Retrospectively the results of surgical procedures after preoperative localisations of 1998 and of 2001 were reviewed and compared. In 2001 VAB was introduced in the evaluation of non-palpable clusters of microcalcifications.

Results: In 2001, 213 lesions and in 1998, 146 lesions needed a preoperative localisation. 23% (50 of the 213 lesions) were clusters of microcalcifications in 2001 and 50% (73 of the 146 lesions) in 1998.

Only 22% (11 of the 50 clusters) showed benign histology after excision where this was 49% (36 of the 73 clusters) in 1998. Of these 11 clusters, 5 clusters were proliferative fibrocystic lesions (radial scar and atypical hyperplasia).

Of the malignant (39 of the 50) clusters of microcalcifications, 67% had a VAB prior to surgery. 5 patients needed a re-excision (4 mastectomies, and 1 axillary dissection).

Comparing with 1998, there was an important decrease in the re-excision rate (from 22% to 12%), where re-excision was more frequent when no biopsy was done preoperatively.

Conclusion: The introduction of VAB reduces the number of surgical procedures for benign cluster of microcalcifications and facilitates one-step surgery.

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Review of lymphomas diagnosed in a Breast Unit

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Background: A pathological result of lymphoma is almost always an unexpected result in a Breast Unit. Our purpose is to study the clinical aspects of lymphomas diagnosed in our Breast Unit.

Material and methods: We have included 2651 patients who had a diagnosis of malignancy in our Breast Unit between January 1995 and July 2003 and who were included in the Unit computer database. We have found patients who have had a pathological result of lymphoma and we have performed a retrospective study using their case-histories.

Results: Ten patients had a pathological result of lymphoma and represent 0.38% of cases with a malignant diagnosis. Nine patients consulted us because of clinical or radiographic breast abnormalities, with or without axillary adenopathies, and one patient consulted because of axillary nodes without breast pathology. The ages range from 22 to 87.

Three cases were primary breast lymphomas (B-cells) and one more (T-cells), who was diagnosed in terminal stage, probably also was one of former (in total, 0.15% of total malignant breast pathology). Two of them had antibodies against hepatitis C virus and one against HIV. A fifth case with a lymphoma localised in the breast had a mammary recurrence of a B-cell lymphoma treated in another centre. The mammographic findings in these cases varied from benign features to a high suspicion of malignity. The diagnosis was performed by a surgical biopsy in one case, by a core biopsy in three cases and a punch in the last one. There was no need of axillary biopsy.

The other five cases were extramammary lymphomas: four B-cell lymphomas with mammography with benign findings, and one Hodgkin's disease with a clinical presentation and radiographic features compatible with an inflammatory breast cancer, having breast swelling without a dominant mass and axillary and supraclavicular adenopathies. Four patients had a negative breast biopsy and we needed a surgical axillary biopsy in three cases.

Conclusions: Primary breast lymphoma is an uncommon lesion and can present diverse mammographic images, from benign features to high-suspicion lesions. We must not forget the possibility of an extramammary lymphoma when the patient has axillary adenopathies without evidence of a breast lesion. We do not always need an open biopsy to make the diagnosis. We must be aware of the possibility of a lymphoma in patients with antibodies against HIV and to perform an accurate control and follow-up.

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How often unsuspected cytologically nipple discharge is a symptom of underlying breast cancer

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Background: Nipple discharge is can be caused by benign diseases of the breast, but also may be a symptom of an underlying breast cancer. Fear that nipple discharge might be a symptom of underlying cancer is the main issue motivating patients and their physicians to treat this disorder surgically.

Objective: To assess the rate of false negative results of cytologic examination of nipple discharge in patients qualified to surgical treatment.

Material and methods: From 1977 to 2002, 414 women were operated on for nipple discharge in our Department. The study group was composed of 234 women, in whom no palpable tumor was identified on palpation, no cancer or suspected cells were identified on cytologic examination of the nipple discharge. In 177 of them discharge was unilateral and in 57 was bilateral. Altogether 291 occurrences were analysed. We evaluated the incidence of cancer diagnosed on pathological examination of the excised breast tissue in these patients.

Results: Breast cancer was diagnosed in 4 cases. Therefore the results of cytologic examination of nipple discharge were false-negative in 1.4% of cases (4/291). In all these cases the character of nipple discharge was described as bloody.

Conclusions: The rate of false-negative results of cytologic examination of nipple discharge is very low. Therefore there is no necessity to treat surgically all such patients in order to verify the possibility that the discharge is caused by underlying cancer. Further diagnostic work-up should be undertaken in such patients.

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The contribution of intraoperative cytology in the diagnosis of hyperplastic lesions of the breast

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Background: To report the incidence of the hyperplastic lesions in benign and malignant breast tumors, as well as to evaluate the contribution of the intraoperative imprint cytology in the diagnosis of hyperplastic breast lesions.

Material and Methods: 486 biopsy specimens from breast cancer patients who underwent surgical treatment were evaluated. Intraoperative