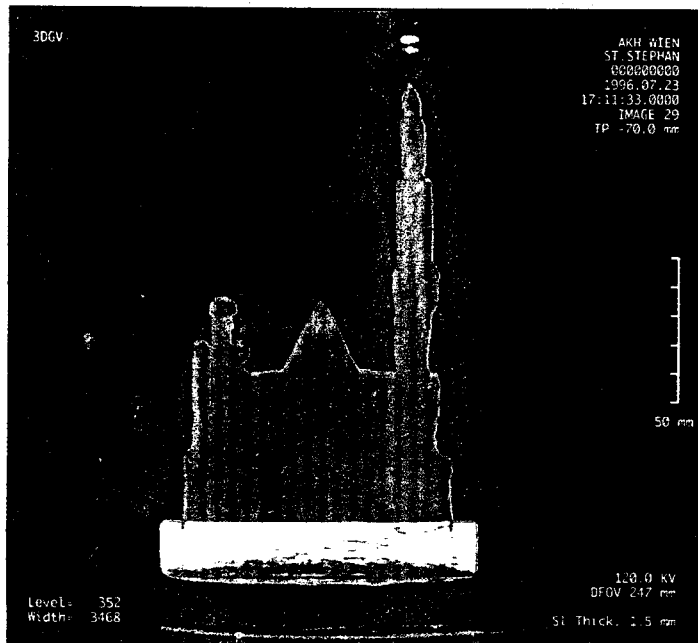
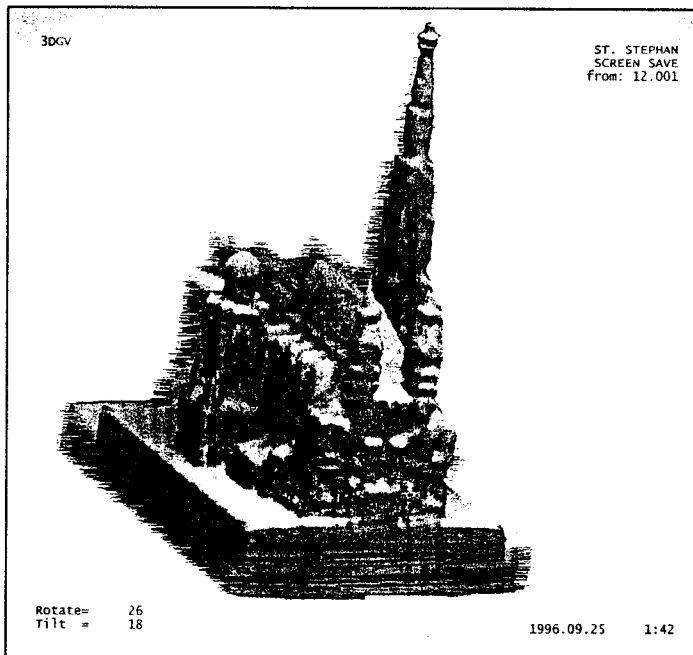
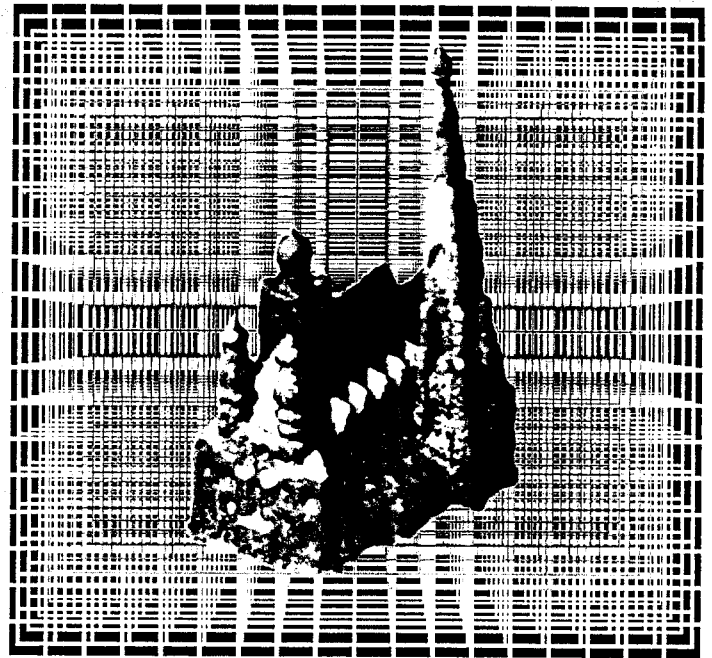


SCIENTIFIC PROGRAMME AND ABSTRACTS



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(n = 2), hyperechoic mass with less echogenic central part (n = 2), hyperechoic nodule with hypoechoic rim (n = 2), anechoic mass with edge shadowing (n = 3), complex cystic mass with echogenic bands (n = 2). The nodules were 6–16 mm in diameter. 19 masses were detected at mammography and the mammographic features were compared with sonographic appearances. Five palpable masses were not identified at mammography in a predominantly fatty replaced breast. Positive anamnestic data were revealed in 35% (n = 7) of women: trauma, previous biopsy, breast saving operation and adjuvant irradiation, reduction mammoplasty.

Conclusion: Sonography is a very useful method to diagnose fat necrosis comparing to mammography, especially combined with US guided FNAB.

2-047

3D power Doppler imaging in breast tumors

K. Sasaka, K. Kuroki, Y. Nakajima, T. Ishikawa; *Kawasaki/J*

Purpose: This study was conducted for the purpose of observing angiogenesis of breast tumors using the 3-D power Doppler method, and comparing findings with the 2-D color Doppler method.

Methods and Materials: 2-D color Doppler and 3-D power Doppler were performed on 4 cases of breast tumor (consisting of 2 cases of papillary ductal cancer, 1 case of invasive ductal cancer, and 1 case of fibroadenoma).

Results: In the 2 cases of papillary ductal cancer and 1 case of invasive ductal cancer, 3-D power Doppler more clearly depicted the pulsating flow following an irregular course that entered the tumor than 2-D color Doppler. In the 1 case of fibroadenoma, 3-D power Doppler provided a three-dimensional depiction of the abundant flow and its course focusing primarily on the edge of the tumor.

Discussion and Conclusion: 1) Three-dimensional images obtained with 3-D power Doppler were confirmed to yield a more detailed depiction of blood vessel structure than 2-D color Doppler. 2) Assessment of vascularity by 3-D power Doppler is expected to facilitate determination of prognosis.

2-048

Ultrasound recognition of breast lesions in surgical specimens

F. Zandrino, A. Imperiale, M. Calabrese, C. Vecchio, G. Canavese, F. Sardaneli; *Genoa/I*

Purpose: To recognize breast lesions in surgical specimens with ultrasound (US).

Methods and Materials: Twenty-two US-detected breast lesions (7.1–20.0 mm) were localized for surgical excision with US-guided charcoal injection. Five lesions in young patients were not studied with mammography; 14 of the remaining 16 lesions were recognized with mammography. All the surgical specimens were studied with X-ray and US (small parts sector probe, 10 MHz).

Results: Histopathology revealed 9 carcinomas and 13 fibroadenomas. All the 22 lesions were recognized in the specimen with US, ranging 6.0–18.5 mm (significant reduction from presurgical measurements, $p = .009$, Wilcoxon test). X-ray specimen examination was inconclusive for 6 lesions (1 carcinoma and 5 fibroadenomas). In 18/22 cases, morphologic correspondence of the US appearance of the lesion before and after excision was found. In all cases, US enabled us to detect the borders of the lesions, assessing that surgical excision was correctly performed, as confirmed at histopathologic examination. Specimen US examination time was less than 4 minutes.

Conclusion: US allowed us to recognize presurgically US-detected breast lesions in the specimens, also when X-ray before and/or after surgery was inconclusive.

(Submitted by Internet)

2-049

ROC-analysis in complementary diagnostic approach in diagnosis of breast pathology

S. Antevska-Grujoska, D. Dimcevski, J. Cabukovska, E. Stojovska-Jovanovska, J. Joseva, B. Daskalov; *Skopje/MAC*

The purpose of this study was to determine the value of palpation, mammography, ultrasonography and their combination in diagnostic procedure of the breast abnormalities.

745 lesions: 333 benign and 412 malignant were preoperatively diagnosed as benign, probably malignant, suspicious for malignant and malignant.

Substantial overlapping was found between the diagnostic characteristics of benign and malignant lesions.

Complementary diagnostic approach revealed the highest values for sensitivity (99.3%), specificity (98.4%), positive predictive value (98.6%), negative predictive value (99.2%) and accuracy (98.9%). The value of Az was 99.84%.

The values of sensitivity, specificity, positive predictive and negative predictive value were analysed through moving diagnostic threshold on three levels:

-level I: (benign/probably malignant, suspicious malignant + malignant)

-level II: (benign + probably malignant/suspicious for malignant + malignant)

-level III: (benign + probably malignant + malignant/malignant)

The results of ROC analysis confirmed that the lowest threshold (level I) is the most suitable way for each method as a single diagnostic tool and for their combination as well in determining the nature of the pathological findings in the breast.

2-050

Breast cancer in the male: a retrospective analysis of 17 cases

S. Jankovic, A. Petricevic, N. Ilic, J. Bilic, S. Andelinovic, D. Primorac; *Split/HR*

Purpose: The aim of this study is to review 17 cases of the breast cancer in the male treated within the period 1988–1997 at the University Hospital Split, Croatia.

Methods and Materials: Patients age ranged from 53 to 77 years, (average 64.2 ± 8.4 years). Clinical examination and mammography were the basic diagnostic modalities. Mammography were performed on Senograph 500 "CGR" and Mammomat 200 (Siemens) at the Department of Radiology. Surgery were performed at the Department of Surgery UHS.

Results: At the time of diagnosis, 6 (35.3%) patients were at stage I, 9 (53%) at stage II, and 2 (11.7%) at stage IV. In all cases surgery was the first choice of therapy while modified radical mastectomy and tumorectomy were performed in 14 or in 3 patients respectively. Histology revealed invasive ductal carcinoma in all cases. After a follow-up period (ranging from 11–118 months), 8 (47%) patients had died, and 9 (53%) survived. The overall median survival for all patients was 4.7 ± 2.76 years.

Conclusion: Our results suggested that the breast cancer in the male should be staged in the same way as it is in female. The primary treatment is surgical resection (modified radical mastectomy is the predominant). Our findings suggests no difference in prognosis of the breast cancer in the male of in the female. Mammography with clinical examination have a primary position in diagnosis.

2-051

Abnormalities of the breast in pregnancy and lactation

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Purpose: The breast undergoes significant changes during pregnancy and lactation. During the period, distinguish the normal physiologic change from abnormality is challenging. The purpose of this exhibition is to demonstrate imaging of abnormalities of the breast in pregnancy and lactation

Methods and Materials: We retrospectively reviewed imaging of 22 patients with breast abnormalities during pregnancy and lactation.