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PUBLICATION

Breast cancer: Analysis of patients with family history of breast cancer

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Purpose: Family history of breast cancer is of great importance because it is a significant risk factor in women. In this study family histories of 226 breast cancer patients were evaluated.

Methods: A special questionnaire was sent to 511 breast cancer patients diagnosed in 1996–1997. Family histories from 226 replies received were studied and analysed.

Results: In 101 families (44.5%) there were no affected relatives. In 102 families (45.1%) there were affected relatives with cancers of different localisations. Breast cancer was associated with breast cancer in 24.5% of families; with ovarian cancer in 2.9% of families and with uterine cancer in 20.5%.

Conclusion: Identifying of breast cancer families may be relevant for screening, prevention and treatment of breast cancer on a population-wide basis.

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PUBLICATION

DNA content by flow cytometry in breast cancer: Association with known prognostic factors

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New prognostic features are required to optimize selection of high risk breast cancer patients for adjuvant therapy. DNA content is one of these new prognostic factors.

Purposes: 1) Evaluate the correlation between the cytometric parameters and known clinical and pathological prognostic variables; 2) Study the distribution and cut-off points of the S-phase related variables.

Methods: Flow cytometric analysis of DNA content was performed on 214 fresh frozen tissue samples of women with breast carcinoma. DNA ploidy, DNA Index (DI), S-phase fraction (SPF), S + G2/M phase fraction (S + G2/M) and the average % S-phase cells (Average % S) were studied and correlated with stage, age, type and tumour grade, lymph node status, tumour size and steroid receptor status.

Results: No differences were found between the different aneuploid tumours. DNA ploidy was correlated significantly with stage, malignant grade, mitotic index and lymph node status. Two groups of aneuploids tumours were identified by DI: aneuploids with DI & #61603; 1.7 were correlated with features associated with poor prognosis. The three S-phase parameters values were significantly different for DNA ploidy. Therefore, these variables were analysed separately for diploids and aneuploids. To establish the cut-off points we used average and percentiles values, as seen in the literature. The different S-phase variables and cut-off points gave distinct correlations.

The associations found with known prognostic variables, confirm the clinical utility of DNA content. Standardized methods (special with S-phase variables) are necessary to allow comparison between the results obtained by the literature.

Breast cancer early disease

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POSTER DISCUSSION

Review of the axillary lymph node dissection for breast cancer in an ambulatory setting

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Purpose of the review: the feasibility of the axillary node dissection under general anesthesia in an ambulatory setting.

Method: 87 patients with breast cancer diagnosed by fine needle aspiration or core biopsy or excisional biopsy were scheduled for conservative surgery. The operation consist of tumorectomy and axillary node dissection if the tumorectomy was already done. All the patients were scheduled to be operated under general anesthesia and discharged the same day: all the patient had to recover from the anesthesia for at least 3 hours.

Result: 80 patients were discharged the same day. Seven patients required an admission, 4 patients because of nausea and vomiting and 3 patients couldn't meet the requirement of 3 hours of recovery before discharge. All the seven patients were discharged the next days. No complication were reported.

Conclusion: Conservative breast surgery can be done safely as an outpatient procedure.

The financial resources in accordance with the patient satisfaction and the low morbidity are changing our "old way" of doing.

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POSTER DISCUSSION

Sentinel node (SN), diagnosed by single and double isotope technique

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Purpose: We wanted to use a SN method with a steep learning curve, use of isotope alone, and with a double isotope technique to see if peritumoural and subdermal injection showed the same SN.

Methods: All pts. have given written consent. Pts. with enlarged lymph nodes in the axilla or multifocal tumours were excluded. 0.1 ml 10 MBq 99Tc-Nanocoll was injected medially and laterally to the tumour or to the tumour cavity. Using double isotope, 99Tc and 111In were injected alternatively subdermally and near the tumour. During the operation on the day after, scintigraphy pictures and a hand-guided gamma-probe were used. Maximally three SNs were ranged according to isotope accumulation and investigated by frozen section. Finally standardised axillary dissection was performed. SN immunostaining for cytokeratin was employed.

Results: 81 pts. are included. Scintigraphy could show SN i 60 cases. During the operation SN was identified in 6 more cases, whereas 2 SNs, positive on the scintigraphy, were not found. SN was identified in 64 pts. One single SN was found in 31, two in 21 and three among 12 pts. Cancer infiltration was found in 28 among the 64 identified SNs. In 13 (47%) SN was the only positive lymph node. Cytokeratin showed microinvasion in four pts. Frozen section revealed the infiltration in 17. False negative range 3.6% (1/28). So far, performed in a few cases, double isotope has shown identical SN.

Conclusion: Use of isotope alone identifies SN in 85% of cases. The false negative rate is very low. Different injection sites seems to show the same SN.

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POSTER DISCUSSION

Sentinel node biopsy versus axillary node sampling in axillary staging

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Purpose: sentinel node biopsy (SNB) is proposed as a minimally invasive method of staging the axilla. Axillary node sampling (ANS) is an established minimally invasive staging procedure of known accuracy. This study was designed to allow a comparison between SNB and ANS.

Methods: 130 patients with operable breast cancer were preoperatively injected with 27 MBq 99m-Tc labelled colloid (nanocoll) immediately adjacent to the tumour. Median interval between injection and surgery was 3 hours (20 mins–18 hrs). At operation a standard 4-node ANS was performed following either wide local excision or mastectomy. Each node was then counted using a gamma-detecting probe (C-Trac). A search was then made to find a node with higher counts directed by the probe. If such a node was found it was excised as a fifth node. Each node was submitted separately to pathology and underwent standard histological assessment.

Results: the sentinel node (SN) could not be identified in 8 cases. The SN was excised as part of the ANS in 76% of cases. For 5 patients the SN was false negative. No patient was understaged by ANS.

Conclusion: these results suggest that SNB is an acceptable alternative but offers no advantage over ANS as a staging procedure in breast cancer.