528 POSTER

Aggressive fibromatosis of the breast. Clinical, pathological & mammographic findings

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Desmoid tumors, fibromatoses, are uncommon tumors which involve mainly the abdominal wall, the chest wall, and the limbs. Very rare is the localization to the breast. Illustrated are the clinical, pathological and mammographic findings with a discussion on their differential diagnosis from other benign or malignant tumors of the breast.

529 POSTER

The expression of proliferating antigen Ki67 and PCNA and products of suppressor gene p53 in primary invasive ductal carcinoma of female breast

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The aim of the study was to examine the consecutive series of primary ductal invasive tumours and find out: a) the expression of some biological cellular parameters as proliferating antigens Ki67 and PCNA and products of suppressor gene p53; b) correlation between the levels of expression of those factors and classical prognostic factors. In 1994 eighty eight woman were operated for primary ductal carcinoma of the breast. The material used in the study: a) tissue samples fixed in 10% buffer formaline and paraffin embedded; b) tissue samples of the same tumours to estimate levels of steroids receptors. We used monoclonal antibodies (Dakopatts). The examination of steroids receptors was done with the usage of immunoenzymatic ELISA method. The kinetics for nuclear antigens: Ki67, PCNA, p53, defined as index, has been estimated with half-quantitative method with the usage of Hogg's grating (number of positive cells/1000 cells in 10 microscopic fields). The estimation has been done by two pathologists and the final result has been reported as arithmetical mean.

Results: 1. High index IP PCNA, Ki67, I p53 and low levels of steroids receptors correlates with high histological malignancy (Bloom III); 2. Low index IP PCNA, Ki67, I p53 correlates with high levels of steroids receptors; 3. The estimation of high levels of index IP PCNA, IP Ki67 can be helpful for separate tumours of high proliferating activity; 4. High index of I p53 do not correlate with the diameter of tumour and with involvement of axillary lymph nodes; 5. It seems that the estimation of proliferating antigens together with products of suppressor gene p53 might have greater prognostic value than the estimation of single of those factors.

530 POSTER

Estrogen receptor analysis on breast cancer imprints

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The routine analyses of estrogen receptor (ER) is performed in frozen breast cancer samples or in paraffin embedded material. The analyses on imprints may be a rapid and simple alternative.

Purpose: To compare ER analysis on imprints and in frozen tissue.

Methods: Imprints from frozen breast cancer tissue using the monoclonal antibodies ID5 (n = 59). Negative = no or very few stained nuclei; positive = more than a few stained nuclei.

Cytosols from frozen tissue: enzyme immuno assay (EIA). Negative: 0–2.9; weak positive: 3.0–24; positive: ≥25 fmol/mg protein

Results: 15 ER_{EIA} negative samples were negative on imprints, and 32 ER_{EIA} positive were also positive on imprints. The group of 12 cases with a weak positive ER_{EIA} concentration showed a heterogenous pattern on imprints, 5 negative, 6 positive and 1 was not possible to evaluate.

Conclusions: ER analysis on imprints and in frozen breast cancer tissue showed overall concordant results. Samples being weak ER positive in frozen tissue may, however, on imprints (cytologically identified nuclei) be separated into two groups, one ER positive and one ER negative. The clinical consequence of this finding remains to be elucidated.

531 POSTER

Case report: Primary neuroendocrine tumour of the breast

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Introduction: primary neuroendocrine tumour of the breast is one of the most uncommon variants of breast carcinoma. The diagnosis can only be made if a non mammary site is excluded clinically or if an in situ component can be demonstrated histologically. In most published descriptions these criteria have not been met.

Case Report: a 72 years old women was studied in the Department of Gynaecology for blood discharge in her left nipple. A 1 cm tumour was detected through exploration.. Malignancy was confirmed by fine needle biopsy. The extension study was negative for other tumour sites.

Pathology: the tumour length was 16 mm in two separated focus and intraductal growth existed.. The histopathological degree was II/III. The immunohistochemical study of the tumour cells was positive for neuron-specific enolase, chromogranin, cytoqueratin and S100 protein. Ultrastructural study confirmed the neuroendocrine type.

Conclusion: this case acomplishes the criteria to be considered a primary neuroendocrine tumour of the breast.

Friday, 2 October 1998 16:00-18:00

PARALLEL SESSION

Biology and immunology

533 INVITED

Stromelysin-3 (ST3), from basic research to molecular medicine

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Stromelysin-3 (ST3) is a matrix metalloproteinase (MMP) expressed in mesenchymal cells located close to epithelial cells, during physiological and pathological tissue remodeling processes (Basset et al., 1997, Crit. Rev. Oncol. Hematol., 26: 43). In human breast carcinomas, high levels of ST3 expression in intratumoral fibroblasts is found to be associated with poor clinical outcome (Chenard et al., 1996, Int. J. Cancer, 69: 448), suggesting that ST3 plays a role during malignancy. Consistent with this hypothesis, the lack of ST3 alters malignant processes in ST3 null mice ($ST3^{-/-}$) (Masson et al., 1998, J. Cell Biol., 140: 1535). Altogether, these data give evidence that ST3 promotes the implantation/survival of malignant cells in host tissues, a key process for both primary tumors and metastases. ST3 therefore represents an attractive target for specific MMP inhibitor(s) in future therapeutical approaches directed against the stromal compartment of human carcinomas. Since, in contrast with malignant cells, stromal cells are genetically stable, such therapy should induce little or no acquired drug resistance, and could be used in combination with conventional cytotoxic treatments (Stetler-Stevenson et al., 1996, Semin. Cancer Biol., 7: 147; Kerbel, 1997, Nature, 390: 335).

534 ORAL

Molecular mechanisms leading to C-ERBB2 gene overexpression in breast cancers

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Purpose: C-erbB2 oncogene overexpression in breast cancers is due to increased transcription. Here we characterized one a new cis element responsible for c-erbB2 overexpression.

Methods: Gel retardation and footprinting with nuclear proteins from the BT474 human breast adenocarcinoma cells; site directed mutagenesis; construction and transfection of reporter vectors in breast cancer cells.

Results: A new cis acting element, located about 500 bp upstream the CAP site, was shown to contribute to c-erbB2 mRNA overexpression in