

328

STEROID RECEPTOR CONTENT IN SYNCHRONOUS AND ASYNCHRONOUS BILATERAL BREAST CANCER

Branković-Magić M., Nešković-Konstantinović Z,
Nikolić-Vukosavljević D, Kanjer K, Spuziĉ I.

Institute of Oncology and Radiology, Belgrade, Yugoslavia

Estrogen and progesterone receptor content was analyzed in 55 patients with bilateral breast cancer. Steroid receptor content was measured quantitatively by DCC method. 34 patients had synchronous and 21 patients had asynchronous breast cancer (median value of time interval was 30 months). 17/21 patients received adjuvant therapy, mainly local radiotherapy (9/17), between two receptor determinations. There was no statistically significant difference between steroid receptor content in two tumors of synchronous and asynchronous bilateral breast cancer. However, statistically significant difference between estrogen and progesterone receptor content in two tumors of asynchronous biopsies was found when both the tumors were characterized by histologic grade II. There was significantly longer time interval (median values: 42 months versus 16 months, $p < 0.05$) before the tumor detection in an opposite breast when the second tumor was steroid receptor positive.

330

TISSUE PLATELET DERIVED GROWTH FACTOR (PDGF): CORRELATION WITH SURVIVAL IN PATIENTS WITH ADVANCED BREAST CANCER

Seymour, L. Bezwoda W.R.

Department of Hematology and Medical Oncology
Department of Medicine, University of the
Witwatersrand Medical School, York Road,
Parktown, 2193, Johannesburg, South Africa.

Growth Factors such as transforming growth factor-beta (TGF- β) are thought to modulate the biologic behaviour of breast tumors. Whereas in vitro data suggests TGF- β to be a negative growth modulator, the role of PDGF is uncertain. We have previously shown increased levels of serum PDGF to impact negatively on prognosis in breast cancer. In this study we have examined 120 patients with advanced breast cancer and assayed hormone receptors, proliferative index, P24, p-glycoprotein and various growth factors including PDGF and TGF- β . TGF- β levels were not correlated with PI, response or survival, and appeared not to function as a negative growth modulator. However, elevated tissue PDGF levels had a significant ($p = 0.01$) negative impact on survival. Tissue and serum PDGF appears to have prognostic significance in patients with advanced breast cancer.

329

EGF-R IN LOCALLY ADVANCED BREAST CANCER PATIENTS

Nešković-Konstantinović Z., Nikolić-Vukosavljević D, Branković-Magić M, Vukotić D,
Trbojević P, Vuletić L, Spuziĉ I, Kanjer K.

Institute of Oncology and Radiology, Belgrade, Yugoslavia

It has been recently reported that EGF-R have the prognostic value in operable breast cancer (BC) patients. Less is known about the prognostic and predictive role of EGF-R in locally advanced and inflammatory BC. This was the matter of our study; both EGF-R and steroid receptors (SR) were determined in large, inoperable primary breast cancers, with or without inflammation, totally in 13 pre- or postmenopausal pts, aged 41-71. EGF-R were present in 10/13 tumors, being highly positive (>100 fmol) in 5 of them. They correlated inversely to SR status in all cases, being totally absent in SR highly positive tumors, and positive in all 8 inflammatory cancers. The pts. were treated with combined primary treatment: breast irradiation +/- CMF chemotherapy + endocrine therapy in SR positive cases. The initial local therapeutic response was obtained in 10 pts. All EGF-R negative tumors responded, as well as did 7/10 EGF-R positive. In the group with highly positive EGF-R status (>100 fmol) the response was obtained in 3/5 pts, while 2 of them progressed very fast, at the beginning of the irradiation, and did not receive any systemic treatment. Although obtained in a small group of pts our results suggest a certain prognostic value of negative EGF-R status in locally advanced BC. The EGF-R presence seems to be the sign of very aggressive disease, possibly predicting the response to systemic chemotherapy. The correlation between the EGF-R level and the response to systemic treatment should be investigated.

331

CONTRAST-ENHANCED MRI IN THE DIAGNOSIS OF BREAST TUMOURS.

HE Fjösne, IS Gribbestad¹, G Nilsen², OA Haugen³, PA Rinck².
Dept. of Surgery, MR-Center, Natural Sciences Section, SINTEF
UNIMED¹, MR-Center, Medical Section², Dept. of Pathology³,
University Hospital, N-7006 Trondheim, Norway.

With the aim of differentiating breast tumours 28 patients were examined with magnetic resonance imaging (MRI) using a contrast agent (Magnevist®), comparing with clinical findings and histopathology, and for 12 of the patients also with mammography. In the 18 patients where measurements were performed dynamically we found that signal intensity increased rapidly in malignant tumours, reaching a plateau level 1-3 min. after injection. In fibroadenomas contrast enhancement was slower. Based on this difference in contrast enhancement it was possible to differentiate between benign and malignant lesions. This differentiation was in absolute agreement with the histopathology in all cases, indicating MRI as possible non-invasive method of diagnosing breast lumps. Furthermore the size found at MRI was in good agreement with the size of the specimens, and correlated better to real tumour size than mammography.