125 POSTER

Full thickness resection of chestwall for local recurrence of breast cancer

W. Tjalma¹, P. Van Schil², A.M. Verbist³, P. Buytaert¹, <u>P. van Dam</u>¹. Divisions of ¹gynecologic oncology; ²thoracic; ³plastic surgery, University Hospital Antwerp, Beigium

Introduction: Local recurrence is one of the major problems in the treatment of breast cancer. Isolated recurrence in the chest wall occurs only in a small group of patients.

Cases and Results: Three cases are described (pT1pN0M0, pT2pN1M0, pT2pN1M0) of patients developing a local recurrence after the initial treatment (mastectomy). In all cases there were no distant metastasis. The three patients were treated by chest wall resection and reconstruction with PTFE soft tissue patch and latissimus dorsi myocutaneous flap. At present, follow-up time is respectively 41 months, 80 months and 126 months with no evidence of recurrence. There were no per- or postoperative complications and all patients had an uneventful recovery.

Conclusion: In order to achieve local control and due to the lack of other available therapies, chest wall resection with myocutaneous reconstruction must be considered. These ultraradical resections can be achieved with acceptable morbidity, satisfactory cosmetic results and may provide long-term "disease-free" survival for these patients.

126 POSTER

Immediate breast reconstruction in breast cancer

<u>V.P. Demidov</u>, D.D. Pak, V.V. Evtiaghin, A.V. Yermakov. General Oncology Department, Moscow Hertzen Institute of Cancer Research, Russia

The great clinical experience of breast conserving surgery (more than 1500 operations) in nodal forms of breast cancer allowed to give the scientific basis and create the various kinds of surgical intervention including subtotal removal, subcutaneous removal, hemimastectomy with obligatory nodal lymphatic dissection and following immediate breast reconstruction using the autogeneous tissue. Totally from 1991 till 1998 in the department there were performed 260 operations in different cancerous extension (from IIA till IIIB stages). The subtotal breast removal was performed in 154 cases with following immediate reconstruction using musculocutaneous latissimus dorsi flap (136 patients) and rectus abdominis muscle flap (18 patients). Small group (15 patients) had been undergone the subcutaneous removal and reconstruction with latissimus dorsi flap (11) and TRAM-flap (4). Hemimasectomy with immediate reconstruction was performed to 91 patients using latissimus dorsi flap (66), the part of musculis pectoralis major (23) and rectus abdominis muscle flap (2). There were revealed the partial flap necrosis in 5 cases at the early postoperative period. The local relapse had 2 patients. Good aesthetic result satisfying both the patient and surgeon was achieved at 87% of cases that ensured the good life quality to women and kept them up the social and sexual status.

127 POSTER

Abdominal wall closure after TRAM-use of large mesh – Experience with 50 patients

R. Moscona, R. Klein, H. Toledario. Breast Clinique Rambam Medical Center, Israel

Abdominal wall competence is a major concern of all plastic surgeons using the TRAM flap for breast recontruction. Low hemia rates and adequate abdominal stability are standard expectations in abdominal wall closure. Described here is this institution's experience with the use of a large piece of synthetic mesh as a supplementary reinforcement for the entire abdominal wall in an attempt to stabilize it and achieve a superior abdominal aesthetic result. Fifty consecutive patients had routine reinforcement with the extended mesh technique. Mean patient follow-up was 24 months with a minimum of one year. No hernia or mesh-related infection were encountered and, only one patient had a lower abdonimal bulge. We wish to present our experience with this method of abdominal wall closure.

POSTER

Developing new methods of surgical management of breast cancer followed by plastic

A.E. Esenkulov, S.A. Esenkulova, A. Mukashev. Departament of Oncology, Kazak National Medical University, Almaty, Kazakstan

Purpose: To develop and study the opportunities for novel methods of surgical management of breast cancer followed by plastic and to investigate the short-term outcomes.

Method: the technique of subcutaneous mastectomy, with the nipple and areola conserved, combined with extended sectoral resection, has been developed. Subcutaneous mastectomy was followed by plastic with a ready gel-filled endoprosthesis; extended sectoral resection was followed by plastic with a free homograft from gluteal, axillary areas or from anterior abdominal wall. The method was used in 80 stage I–II breast cancer patients ($T_{1-2}N_0M_0$). Observation was continued for three years. The control group consisted of 100 patients who received modified radical mastectomy using our own method and 80 patients with Holsted mastectomy.

Results: the cosmetic effect is exellent; the short-term outcomes of cancer treatment improved.

Wednesday, 30 September 1998

16:00-18:00

PARALLEL SESSION

128

Molecular markers with clinical potential

130 ORAL

Preoperative serum VEGF in primary breast cancer patients – Its relation with oestrogen receptor status and cancer type

K. Heer, H. Kumar, V. Speirs, P.J. Drew, N.J. Fox, J.P. Carleton, R.T.J. Monson, M. Kerin. *University of Hull, Academic Surgical Unit, Castle Hill Hospital, Cittingham, East Yorkshire HU16 5JQ, UK*

Purpose: Tumours require angiogenesis both for their growth and metastasis. Vascular Endothelial Growth Factor (VEGF) is one of the most potent angiogenic cytokines. In breast cancer, increased tumour levels correlate with a decreased relapse free interval. The purpose of this study was to determine the relation of serum VEGF to the various indices of breast cancer.

Methods: Preoperative serum VEGF was collected from 200 consecutive primary breast cancer patients and assayed for VEGF165 by quantitative ELISA. A comparison was made with the serum VEGF levels of 88 healthy female controls. (Mann- Whitney test, ANOVA and Spearman's correlation were used for statistical analysis)

Results: All stages of breast cancer had preoperative serum VEGF levels significantly elevated compared to controls (p < 0.0005). Four tumours could not be typed on cytology.

The results according to type and ER status were as follows:

Туре	No.	Median VEGF (pg/ml)	Interquartile Range (pg/ml)	p-value (Mann-Whitney)
Controls	88	167.5	101.5 ± 245.3	
Ductal/NOS	164	303.4	152.2 ± 439.5	< 0.0005
Lobular	19	178.1	109 ± 290.7	0.76
DCIS	13	449.7	321.03 ± 709.5	< 0.0005
ER Negative	37	194.2	133.1 ± 392.7	0.24
ER Positive	121	298.2	155.6 ± 440.7	< 0.0005

Serum VEGF did not show a correlation with tumour grade, DCIS nuclear grade, number of positive lymph nodes or tumour lymphovascular permeation.

Conclusion: Serum VEGF is elevated in Ductal carcinoma, DCIS and ER positive tumours, but not in Lobular carcinoma or ER negative tumours. These findings may have therapeutic implications if anti-angiogenesis therapy is used in the treatment of breast cancer patients in the future.