232 POSTER

Axillary dissection in stage i breast cancer

L.A.G. Brondi, J. Stecca, M.C. Ferro. *Medical School of Sorocaba, PUC, São Paulo, Brazil*

Purpose: Is complete axillary dissection necessary to treat stage I breast cancer?

Results: in 271 stage I breast cancer, axillary metastasis were found in 96 cases (35.5%). Of these, positive nodes were present at level I in 100% of cases and at level II in 10.3%. Even with the involvement of levels I and II, metastasis at level III and Rotter were not found at stage I breast cancer. Based on these data, 101 cases stage I were treated with level I and II axillary dissection. Axilla was positive in 21 cases (20.5%): metastasis at level II was present only in one case. A total of 2.401 nodes were removed (23.5 per axilla). Of these, 39 were histologicaly positive: only 2 nodes at level II. "Skip" metastasis in 1 case (1.0%).

Conclusion: axillary dissection of levels I and II is sufficient to treat the axilla in stage I breast cancer.

233 POSTER

Increasing the percentage of breast-conserving surgery for treatment of breast cancer

A. Escobedo, E. Benito, D. Azpeitia, L. Prieto, F. Moreno, J.M. Serra, M. Gil. *Institut Catala Oncologia Clinical Oncology Av. Castelldepels KM 27 E-08907 Barcelona, Spain*

Introduction: Surgical treatment of breast cancer has changed in the last ten years. Many clinical studies have proved that the results are the same for breast-conserving surgery and mastectomy. The Consensus Meeting in 1985 declared breast-conserving surgery part of the standard treatment for breast cancer.

Purpose: 1) To evaluate the percentage of breast-conserving surgery in our hospital., 2) To design protocols for increasing the percentage of breast-conserving treatment.

Methods: Phase I) to make and to publish multidisciplinary protocols of diagnosis and treatment which have breast-conserving surgery as an objective (1989). Phase II) to design coadjuvant protocols of breast-conserving surgery: imaging-guided needle localization and biopsy of non palpable breast lesions (1990) Phase III) Protocols for increasing the percentage of breast-conserving surgery: primary chemotherapy (1992–3).

Results: We treated 1556 patients with breast cancer between 1989 and 1997. Phase I) Between 1989–1991 the achieved percentage of breast-conserving treatment was 33.7%. Phase II) The improvement of the circuit of diagnosis of non palpable lesions increased the percentage to 44% (1992–93). Phase III) Primary chemotherapy increases the percentage of breast-conserving surgery in our hospital. In 1997, 73% of 221 patients with operable breast cancer underwent breast-conservative surgery.

Conclusion: The rate of breast-conserving surgery should be included as indicator in quality improvement programs.

234 POSTER

Clinical significance of rapid scraping cytology to ensure the cancer free margin in breast conserving surgery

M. Miyauchi, N. Yamamoto. *Division of Breast Surgery, Chiba Cancer Center, Japan*

Purpose and Methods: During the breast conserving surgery, we used intraoperative rapid scraping cytology to ensure the pathologically negative margin or to get the basis of the additional excision of the positive margin. Dividing a surgical margin in three parts, we scraped each on the slide glass edge to collect cells. Giemsa stain was given and we got the cytology result within 15 minutes. After the operation we conducted the pathological examination of the specimen and evaluated the cytology result.

Results: 147 cases were given the intraoperative cytology for surgical margin. The accuracy of the intraoperative cytology was as high as 84.4% (127/147). When cytology was judged negative, negative predictive value was 882% (75/85). As for 10 cases misjudged to be cytologically margin-negative, only few residual cancer cells were found in the pathological specimen. Futhermore, the number of the cancer cells collected by scraping reflected the number of the positive ductal components in the pathological specimen.

Conclusion: When cytology is negative, the range of surgical margin is sufficient. Only when cytology is well positive, we should add partial excision to reduce cancer cells. If a surgeon could get the useful information of the surgical margin during the breast conserving operation, he or she would be able to perform enough reduction surgery.

235 POSTER

"Morbidity of quadrantectomy vs mastectomy in operable breast cancer"

A. Nieto, M. Lozano, M.T. Moro, A. Cano, C. Tacuri, J. Cortés-Prieto. *Servicio de Obstetricia y Ginecología. Hospital Universitario Principe de Asturias. Universidad de Alcalá. Madrid, Spain*

Purpose: To analyze the morbidity between quadrantectomy and mastectomy in the treatment of operable breast cancer

Methods: We reviewed 107 patients with breast cancer, from November 1995 to October 1997, treated with quadrantectomy, axillary lynphadenectomy and radiation treatment (n = 36); or modified radical mastectomy (n = 71).

Results: Radical therapies needed more surgical duration than conserving ones (127 vs 109 minutes, $p = 0.02$). In 7% of cases of modified radical surgery occurred postoperative local infection vs in the 17% of patients with breast conserving therapies ($p = 0.2$). Local infections were associated with the presence of seroma and to the older patient (63 vs 54 years old, $p = 0.03$). When a local infection occurred, average hospitalization was prolonged by 6 days ($p = 0.0001$).

Conclusion: Quadrantectomy in surgical breast cancer therapies is sensitively associated with more postoperative local infection than radical modified mastectomy.

236 POSTER

The place of the sentinel node mapping in the management of breast cancer: Prospective analysis – New aspects

A. Makar[1], K. Melis[2], D. Van Den Weyngaert[3], L. Van Leuven[4], M. Kockx[4], J. Vandevivere[2], L. Denis. *Departments of gynecology, nuclear medicine, radiotherapy and pathology. The Middelheim Cancer Center, Antwerp, Belgium*

Purpose: In a prospective analysis we evaluated the concept of sentinel node (SN) in patients with early breast cancer. In addition we correlated the radioactivity of the SN, to its localization and size.

Methods: In a prospective trial 20 patients with recently diagnosed breast cancer (T1-T2) were injected peri-tumorally with 40 MBq 99 mTc nanocolloid the day before surgery. After 3 hours anterior and lateral static and transmission images were obtained by lymphoscintigraphy using a gamma-camera. Using a radioactive pen-marker a tattoo with indelible ink was made on the skin. The intraoperative lymphatic mapping was performed with a hand-held gamma probe (c-Tak, Care Wise). All patients underwent lumpectomy or mastectomy with axillary lymph node dissection.

Results: The SN identification percentage was 85% (17/20). In the remaining 3/20 the LS was also negative. No false negative SN's (skip meta's) were found. In 4 cases (23%) the only positive node was the SN. No correlation was found between volume of the SN and its radioactivity.

Conclusion: Our results show that SN can be localized easily by lymphoscintigraphy and intraoperative gamma probe guided detection and when identified the SN accurately can predict the axillary node status.

237 POSTER

Functional and cosmetic results in breast preserving treatment (BPT)

M. Prekajski, R. Džodić, N. Borojević, L. Mitrović, V. Pošarac, P. Radovanović. *National Cancer Research Center, Breast Surgery Unit Belgrade, Yugoslavia*

Purpose: This paper present experience in BPT in connection with local control of cosmetic outcomes and functional sequelae in patients in breast carcinoma.

Methods: For period 1990–95, 354 pts. were treated with BPT. In prospective study results were evaluated. Cosmetic outcome was based on scoring system. Assessment of functional sequelae was based on qualitative criteria of EORT.

Results: Only 294 pts. were eligible to study protocol. Mean age was 54.7 yr, menstrual status: premeno – 111 (38%), postmeno – 182 (62%). Mean tumor size was 19 mm. Non-invasive were 21 (7%), invasive carcinoma 273 (93%), N-nodes: was 37% (109); N+ 63% (184) pts. Follow-up time were 24–80 months. Local recurrence interval in group was 37 months. For

distant metastasis mean time was 61 months. Disease free-survival was 83% (243 pts). Cosmetic outcome: excellent 152 (52%) good 96 (34%), poor 35 (14%).

Cosmetic side effect: breast symmetry 206 (70.3%); fibrosis 24 (8.1%), nipple asymmetry 31 (10.5%), breast deformity 42 (14.3%), breast oedema 15 (5.1%), skin changes 8 (2.7%). Functional sequelae: breast inflammation 7 (2.3%), radiofibrosis 24 (8.1%), muscle paralysis 9 (3.5%), neuropathy 4 (1.3%), limited mobility of arm 30 (10.2%), lymphoedema of arm 7 (2.3%).

Conclusion: BPT plays important role in local and distant control of disease. Good cosmetic effects and minimal functional sequelae give chance to patients for satisfying long term quality of life.

238 POSTER

Successes and relapses in breast conserving therapy (bct) in early breast cancer on the base of 17 years own experiences

J. Berner, A. Jeziorski, A. Berner, D. Nejc. *Medical University of Lodz Dept. of Oncology ul. Paderewskiego 4 93509 Lodz, Poland*

From March 1981 to December 1997, 194 patients with early breast cancer with tumour up to 3 cm in maximum diameter and no palpable axillary lymph nodes were treated conservativelly in Clinical Oncology Unit of Medical University of Lodz. The procedure consisted of QUART technique, that means quadrantectomy, axillary dissection and radiotherapy (50 Gy by Cobalt 60). In all N(+) cases adiuvant systemic treatment (6 cycles of CMF) was given. The analysis was performed for cases with minimum 5-years of follow-up with the comparison of group of patients treated by mastectomy. The aim of the study was to estimate successes and relapses in our patients treated by BCT in the aspect of overall survival, cosmetics effect and patient's viewpoint. Long-term results, that is overall survival, noted in 88% of cases, and relapse free survival, in 83% of cases, were comparable with the results in patients after mastectomy (82.5% and 77%). The problem of arm oedema was the same in both groups of patients. The problem of early and late complications after irradiation was more expressed in BCT group of patients. But good cosmetic results, obtained in 70% of cases, as well as better psychological status of treated women means that conservative treatment in early breast cancer can be safe and acceptable alternative to mastectomy.

239 POSTER

Non-palpable breast lesions

R. Sandrini, G.P. Pollini, F. Pellini, L. Rettore, H.M. Ghandour, V. Parise, R. Vecchioni. *Department of Surgical Sciences. University of Verona, Italy*

The very wide use of mammography for diagnosis and screening programs has led. to check a high number of non-palpable breast lesions by time. The problems which arise from are to obtain a correct differential diagnosis distinguishing between benign and malignant lesions and to reach a precise pre-operative localization. During the period January '88–February '98 we have checked 300 women for breast pathology, without symptoms, in whom after performing a screening mammography there had been found 307 radiologically suspected lesions. The pre-operative localization of the lesions was obtained by positioning a metallic reference under stereotaxic guide in 292 cases and ultrasound guide in 15 cases. Surgical approach has been carried out with local anesthesia and subsequent radiological exame of the excised mass was performed to verify the correctness of surgery. We have observed 127 cases (41.3%) of malignant neoplasms and 180 (58.7%) of benign lesions. Of the malignant tumours 68 (53.5%) were infiltrating carcinomas and 59 (46.5%) were in situ carcinomas. Fourteen patients (11%) had lymphnodes infiltration. The authors emphasize the importance of the surgical biopsy after having localized the non-palpable masses using a metallic reference, because at present, this is an elective method to specify the histological type of the sub-clinical lesions. In fact, this approach which could be performed without discomfort for patients, allows a minimal excision of breast tissue avoiding any mutilation in the case of eventually benign lesion and providing the pathologist precise indications about the site of the mass which should be examined.

240 POSTER

Breast conserving therapy in stage I and II breast cancer

Z. Rančić[1], M. Jeremić[1], M. Stojiljković[1], M. Pešić[1], N. Djordjević[1], D. Gmijović[1], L. Djordjević[1], M. Djordjević[1], S. Filipović[2], S. Veselinović[2]. *[1]Surgical Clinic; [2]Oncology Institute, Clinical Center University of Niš, Yugoslavia*

The aim of our work was to compare effects of modified radical mastectomies (Madden, Patey) and breast conserving therapy on breast reccurence and overall survival.

Over the 5-year period from 1988 to 1992 at Surgical Clinic in Niš 142 women were treated for T_1 and T_2 breast cancer. Of the 142 women 94 were treated by modified radical mastectomy and 48 had received breast conserving therapy. This women were separated into two groups. There were no significant differences between the groups in tumor size, incidence of axillary node involvement, histologic grading ($p > 0.05$). In general women treated for breast cancer with breast conserving therapy were younger, 42 years to 48 years treated by modified radical mastectomy.

Five of 48 (10.41%) patients had locoregional recurrence: three of them at or near the primary tumor site, the other at the site separate from the primary site in the breast (histologic lobular type contrary to prior ductal carcinoma and was treated with radical mastectomy-modification Madden), and fifth one in regional nodal area. Four of 94 patients who received modified radical mastectomy had locoregional recurence, all of them on the chest wall.

The overall survival rates in modified radical mastectomy patients and breast conserving group were 89.3% and 91.1% respectively.

The results indicate that there were no significant differences between two groups in locoregional recurrence and overall survival in T1 and T2 breast cancer.

241 POSTER

Surgical treatment of breast carcinoma. A study of 460 cases

M. Pricop[1], C. Daniil[2], L. Strat[1], D. Aursulesei[1], M. Bendescu[1], M. Cocoş[1], C. Gafencu[1]. *[1]IV-th Department of Obstetrics and Gynecology, Division of Gynecologic Oncology; [2]Department of Oncology, University of Medicine and Pharmacy Iaşi, Romania*

Purpose: The present study investigates the evolution of the concept regarding the surgical treatment of breast cancer in our clinic.

Methods: We present, retrospectively, 460 cases with noninflammatory breast tumors in different stages, wich were operated on in our Division of Gynecologic Oncology between May 1992 and March 1998. The following aspects have been analysed: age, menopausal status, stage of disease, diagnosis methods, neoadjuvant treatment, surgical treatment, adjuvant treatment. The number of cases treated 5 years ago or more than that is too small to permit us to make prognostic evaluations.

Results: The surgical protocol consisted in various techniques. Halsted mastectomy (a total of 93 cases) was used less and less frequently (1995–7 cases, 1996–2, 1997–3, 1998–1). Most frequently we used radical modified mastectomy (136 cases, 29.5%) and simple mastectomy with axillary dissection (156 cases, 33.9%). Partial mastectomy with axillary dissection was used in 43 cases (9.3%).

Conclusions: Halsted operation, traditionally used in our clinic, is employed now very rarely (in cases with large tumors). The most frequently used technique is simple mastectomy with axillary lymphadenectomy made by separate incision. We consider the partial mastectomy with axillary clearing and postoperative radiotherapy to be a good alternative. This method was used in 43 cases (9.3%). The frequency of this method could be much higher. The main reason for its not being even more frequently used is the lack of mammary screening in our teritory and, obviously, the small number of cases diagnosed in early stage.