Conclusion: Compressive wound dressing is complicated with more seromas in need of puncture, but on the other hand this treatment was favorable compared to drainage concerning use of analgetics, and they could leave the hospital earlier. We are now preparing a new randomized study with one group treated with compressive dressing combined with drainage for 24 hours.

## PP-2-29

# Axillary Dissection for Breast Cancer: Long-Term Functional Results

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Aim of the study: Evaluation of the long-term functional results after treatment of breast cancer including an axillary dissection (AD).

Patients and methods: Among patients (pts) treated for a breast cancer in the Institute Bergonié, 111 pts (with a minimum and median follow-up after AD of 3 and 6.5 years respectively) were studied on the occasion of a regular follow-up, from 12-1995 to 03-1996. A modified radical mastectomy had been performed in 29.7%, and a conservation treatment in 70.3% of the pts. The median tumor size had been 18.5 mm, a median number of 14 nodes had been removed, and a histological nodal involvement had been observed in 47.7% of the pts. Characteristics of the pts, of the tumors, and of the treatments will be detailed. The functional evaluation was obtained by a medical history, a functional inquiry, and a complete physical examination. Results: Pain in shoulder and arm, weakness in the arm, impaired shoulder function were observed in 31%, 30%, 13%, of the pts respectively. Serious or moderate lymphoedema occurred in 10% and 9% of the pts respectively. A high frequency of late symptoms was significantly correlated to the number of removed nodes, to the number of involved nodes, and to the irradiation of the scar. As concern the breast conservation, no difference was observed. Conclusion: For pts with breast cancer whose treatment includes an AD, the incidence of moderate or serious adverse side-effects remains high. Further studies, preferably randomized, should be planned in order to evaluate the absence of AD in some selected cases.

## **PP-3.** Local treatment (September 11)

#### **ORAL PRESENTATIONS**

# PP-3-1

#### Ductal Carcinoma in Situ (DCIS) of the Breast: About 706 Cases Examined from 1971 to 1995

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DCIS of the breast is occurring with an increasing frequency mostly because of a large use of mammography screening. A better knowledge of this type of breast cancer has led the traditional role of mastectomy for DCIS to be challenge by breast conservative procedures.

The aim of this study is to analyse both diagnosis and treatment procedures used for patients suffering from DCIS who attended our Institute from 1971 to 1995. Patients were included in the study on the basis of histological diagnosis of DCIS. Computerized patient files were retrospectively analyzed allowing to collect patients characteristics, circumstances of diagnosis, mammographic findings and treatment procedures. After treatment, follow up data including clinical examination and mammography were yearly reported for all patients.

706 patients aged 19 to 88 (mean 51.3) were included in the study; 281 (39.8%) of them were postmenopausal women. Circumstances of diagnosis were clinical findings (i.e turnor, Paget's disease or galactorrhea) (43.3%), mammographic abnormalities (50.2%) or occasional discovery (6.5%). Positive mammographic findings were obtained in 87% of patients and mainly represented by microcalcifications (79.4%). Treatment procedures were breast conserving surgery (BCS) alone (37.5%), BCS followed by radiation (25.5%) or mastectomy (37%). The actuarial local recurrence was 7.55% after 77.5 months of follow up.

### PP-3-2

#### Ductal Carcinoma in Situ: Radiosurgical Conservative Treatment in 122 Cases. Analysis of Local Recurrence Factors

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Material: From January 1980 to July 1992, 122 consecutive cases of DCIS underwent conservative surgery in three major hospitals of Strasbourg area. All received complementary irradiation in the Paul Strauss Centre. The median age was 51 years. 69 women were menopausal. According to TNM classification, we found 88 TO, 11 T2, 20 T1, 3 Tx.

Treatment: 21 quadrantectomies and 101 lumpectomies were performed, with axillary dissection in 67 cases. All women received whole breast irradiation by cobalt photons at 46–54 Gy with a scar boost by electrons at 8–12 Gy. 46 women received Tamoxifen.

Histology: DCIS was pure in 106 cases, and with associated LCIS in 16 cases. The excision was complete in 109 cases and doubtful or incomplete in 13. Nuclear grading, analyzed in 84 cases, showed: 9 G1, 42 G2, 23 G3 and 10 G4.

Results: With a median follow-up of 65 months, we observe 10 (8.2%) local recurrences (LR), all in or near the previous tumor bed, with a mean delay of 46 months after initial surgery. Four LR were still DCIS, but 6 were invasive. The salvage treatment consisted of a mastectomy for all the 10 LR. One woman, still alive, developed metastasis. Two women died from other cancers. The only significant risk factors of LR, in multiple regression analysis, are the large histologic size (p = 0.02) and small breast size (p = 0.03). A tendency to significance was noted for incomplete resection, high nuclear grading and total tumor dose less than 60 Gy.

### PP-3-3

# Is Axillary Node Dissection (A.N.D.) Useful for Microinfiltrative Breast Carcinoma (MIBC)?

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From 1970 to 1995, 5626 patients (pts) with operable non metastatic breast carcinoma underwent initial surgery at Institut Bergonie. MIBC represented 268 cases (4.7%). Tumors were non palpable (TO) in 53% (142/268), palpable in 126/268 with a median size of 3 cm. Among the 268 patients, 11.6% (31/268) did not have A.N.D.; 237 pts (88.4%) had A.N.D. with mastectomy in 194/237 pts (81.8%) or conservative surgery in 43/237 pts (18%). After nodes analysis, 90% of pts (214/237) were N $_{-}$ , 10% (23/237) were N $_{+}$ . Nodal involvement was present in 6.4% of TO and 11% of palpable tumors.

Most of nodal involvement was limited with 1 node involved in 78%. Most patients with N— tumors (169/214) (79%) did not receive any adjuvant treatment, 19.2% (41/214) had radiotherapy and 2.8% (6/214) adjuvant chemotherapy; 65% of pts (15/23) with N+ tumors had adjuvant chemotherapy, 13% (3/23) had hormonotherapy and 26% (6/23) had no treatment.

With a median follow-up of 89 months,  $N_{-}$  pts had significative better survival than  $N_{+}$  (p = 0.0006).

Due to low rate of nodal involvement, we may wonder if A.N.D. could be avoided for non palpable MIBC. Randomized trial is on going to answer this question.

## PP-3-4

#### 10 Years Experience in External Beam Radiotherapy and Interstitial HDR 192 Iridium Implantation in the Treatment of Breast Cancer

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The authors present survival data of a prospective treatment method and demonstrate the safe use of Ir-192 high dose rate (HDR) implantations.

Since 1984 HDR Iridium-192 brachytherapy has been used to deliver an interstitial boost to the primary site in conservative breast cancer treatment. Up until December 1993 508 patients with 513 tumours have been treated (T1: 341, T2: 172, N+: 146, N-: 367). Treatment method included external beam irradiation of 45 to 50 Gy to the breast followed by an interstitial 10 Gy boost. Mean follow up of survivors: 69 months (27 to 137).

5-years actuarial data (10-yr. data in brackets): Overall survival: 88.1% (69.7%), local control: 95.9% (89.7%), disease free survival: 84.5% (75.0%), and disease specific survival: 91.8% (77.1%). There were no severe complications, except 1 patient with periostitis and neuralgia. The cosmetic results are very satisfactory.

Conclusion: The use of a HDR source in boosting the primary tumour