

These first-echelon nodes (sentinel nodes) were examined separately for presence of metastasis. In one patient with a primary tumour in the medial upper quadrant, no sentinel node was found in the axilla. Based on the direction of the lymphatic channel, drainage was presumed to have occurred to the internal mammary chain. Thirty-five first-echelon nodes were identified in the remaining 21 patients. In eleven of these patients, the first-echelon nodes and all other axillary nodes were free of disease. In four patients, metastatic tumour was found in a first-echelon node and in one or more other nodes as well. A first-echelon node was the only metastatic node in the remaining six patients. The likelihood of such a distribution of tumour-positive nodes occurring by chance is less than 0.001 (chi-square test).

This study indicates that lymphatic dissemination occurs initially to the first node on the direct drainage pathway. When confirmed *in vivo*, these data may lead to a substantial reduction of the need for axillary node dissection without compromising survival and regional control, and without loss of prognostic and staging information.

PP-2-8 Axillary Lymphadenectomy Prepared by Fat Aspiration Versus Functional Axillary Lymphadenectomy (FAL): Preliminary Results of a Prospective Randomized Trial

S. Giard*, J.C. Laurent, A. Dron. *Department of Surgery, Centre Oscar Lambret, Lille, France*

From 01/01/1995 to 31/01/1996, 200 consecutive patients with operable breast cancer were randomized to either FAL only or FAL prepared by fat aspiration. The average number of seromas was significantly lower with fat aspiration in the group of obese patients (8/25 vs 21/34, $p < 0.05$) and in the group with total mastectomy (17/37 vs 28/39 $p < 0.05$).

The importance of post-op stage, drainage duration, shoulder stiffness was lower in the group with fat aspiration, but the difference was not significant. FAL prepared by fat aspiration preserves anatomic structures and reduces seromas, specially in high risk patients.

POSTER PRESENTATIONS

PP-2-9 Conservative Approach in Subareolar Breast Cancers: A Series of 37 Patients

E. Bussi res*, F. Guyon, P. Tribondeau, L. Thomas, A. Faucher, M. Durand. *Institut Bergoni , Regional Cancer Center, 33076 Bordeaux, France*

A breast conservation in 37 patients (pts) with an operable and subareolar breast cancer < 35 mm is reported.

From 01-01-1987 to 12-31-1994, 37 pts were referred for tumors in the subareolar area, with a median tumor size of 20 mm. The nipple areolar complex (NAC) was clinically infiltrated in 12 pts, retracted without infiltration in 24, and without modification in 1. Thirty pts underwent a first-line conservative surgery, 5 were first-treated with chemotherapy and 2 with tamoxifen. The tumor was removed with a total resection of the NAC in 21 pts, with a partial resection of the NAC in 9, and without any resection of the NAC in 7; an additional intraoperative tube implantation allowed the delivery of an Iridium boost irradiation of 15 Gy in 8 pts. Axillary dissection was performed in all 37 pts. All pts received an external radiation therapy of 50 Gy, with an external electron boost of 10 to 15 Gy in 13 pts; 14 pts were treated with adjuvant tamoxifen, and 2 with adjuvant chemotherapy.

With a median follow-up of 49 months, 1 pt experienced a local failure and 4 pts a metastatic failure. Five-year actuarial overall survival and disease-free survival rates were 97% and 75%, respectively. Cosmetic results were considered as excellent in 3 pts, good in 25, and poor in 7.

Finally, in pts with a breast cancer in the subareolar area, with a tumoral size < 35 mm, a conservative treatment is possible and safe; however, a partial or a complete resection of the NAC may be necessary, and the application of some principles of plastic surgery could improve the cosmetic result.

PP-2-10 Radical Mastectomy by Means of a Periareolar Incision Followed by Immediate Reconstruction

Antonio S.S. Figueira Fo., Jo o E. Beltr o, Eulina Helena Souza, Murilo L. Brito, Yvson Cavalcanti, Rossano Araujo, Ana Leide Santos. *Department: Discipline of Mastology, Faculty of Medical Sciences of Pernambuco, Recife, Brazil*

Summary: The authors present five cases of radical mastectomy (MADEN) performed by means of a periareolar incision, demonstrating that with this incision it is possible to safely remove the entire mammary gland and dissect the axilla at the three levels.

The reconstruction of the breast is carried out with dermomuscular flaps from the musculus rectus abdominis or latissimus dorsi.

The great advantage of this type of incision is the cosmetic aspect, since it leaves no scars.

The disadvantages and difficulties of this technique are discussed in the paper.

PP-2-11 A Prospective Randomized Trial of Short Versus Long Hospital Stay after Surgery for Breast Cancer

J. Bonnema*, A.N. van Geel, A. van Wersch, J.F.A. Pruyn, Th. Wiggers. *Department of Surgical Oncology, University Hospital Rotterdam/Daniel den Hoed Cancer Center, Rotterdam, The Netherlands*

The effects of reduced hospital stay after breast cancer surgery on the quality of care, incidence of surgical complications, well-being of patients and total costs of treatment were studied in a prospective randomized trial. All patients had complete axillary dissection and segmental or total mastectomy. The 'short stay' group ($n = 62$) received early discharge with drains in place, while the 'long stay' group ($n = 63$) remained in the hospital until the drains were removed. Mean length of stay was 4.1 and 9.0 days respectively. Research data were collected from 3 questionnaires and daily and weekly diaries. Results showed that the 'short stay' group was more satisfied with the length of stay. There were no medical or psychosocial disadvantages of early discharge and it offered a greater opportunity for social support within the family. The integral costs including the costs of home care were significantly lower for the 'short stay' treatment (\$ 3444 vs. \$ 4848, $p = 0.0001$).

It is concluded that early discharge after surgery for breast cancer is a cheap and safe alternative for post-operative hospital care with higher patient satisfaction and better psychosocial outcome.

PP-2-12 Axillary Lymphadenectomy by Lipolysis and Liposuction: A Pilot Study

J.L. Brun*, M. Bri x, E. Rousseau, G. Belleann e, G. Brun. *Clinique Gyn cologique, H pital Saint-Andr , 33075 Bordeaux C dex, France*

The trend toward less radical surgery in breast cancer led us to perform axillary lymphadenectomy prepared by lipolysis and lymph nodes suction.

22 patients with clinically uninvolved axillary nodes were included from July 1995 to March 1996. Lipolysis was performed by injection of 300 ml of cold bicarbonate serum. Suction was performed with a Karmann nozzle ch. 8 with a pressure of 1 Bar. 11 mastectomies (group M) and 11 lumpectomies (group L) were performed. Axillary dissection was assisted by endoscopy after CO₂ insufflation and controlled by a 3 cm incision in conservative surgery. Axillary drains were removed when produced less than 20 ml per day.

The mean duration of the dissection was 90 mn (range, 30–150) in the group M and 130 mn (range, 60–180) in the group L. No vessel, muscle or motor nerve was injured during the procedure. The mean number of lymph nodes removed was 14 (range, 8–19): 2 (range, 0–8) by aspiration, 6 (range, 1–15) by endoscopy (group L) and 6 (range, 2–11) by incision (group L). 6 patients (27%) had positive lymph nodes. The mean quantity of lymphorrhea was 410 ml (range, 40–1170) in the group M and 275 ml (range, 45–675) in the group L. The mean duration of drainage was 6 days (range, 2–11) in the group M and 5 days (range, 2–8) in the group L. Lymphoceles were detected in 2 cases (group M) and required subsequent punctures. All patients, except 3 (group M) had abduction and antepulsion of the arm over 9  one month later. Axillary lymphadenectomy prepared by lipolysis and lymph nodes suction is an effective, reliable and well tolerated procedure. Further studies could define the place of endoscopy in breast conservative surgery.