Friday, 19 March 2004 Proffered Papers

ASR was among women aged 50–59, followed by women 40–49 then 60–69, with age specific incidence rates at 96.3, 79.9 and 77.4 per 100,000, respectively. Our correlates as follows with neighboring and other countries (ASR Lebanon: 30, Jordan: 22, Saudi Arabia: 14, Kuwait: 32, UK: 68, France: 78, US SEER Black: 90, USA SSER White: 79).

Conclusions: Lebanon has an ASR for breast cancer that is intermediate between ASR of developed countries and that of developing countries. We emphasize need for study of etiologic contributing factors and stress the importance of implementing screening guidelines. While American and European Cancer Societies recommend Clinical Breast Exam (CBE) every three years from age 20 to 39 then yearly after 40, we recommend that CBE should be done yearly starting from the age of 30. Training of medical students, housestaff, practicing physicians and obstetricians and gynecologists, and nurses to perform proper breast examinations is essential. Physicians should become more acquainted with the discovery and finding of benign lumps and fibrocystic diseases. Advanced and metastatic breast can be devastating not only to the woman, but also to her children and her husband, particularly in the cases of younger-aged patients. Therefore we suggest that more emphasis should be placed on asking husbands to encourage their wives to enroll in screening campaigns, or even have a more active role in examination when women consent. Mammography screening should start at the age of 40. Outside the United States and the Western Hemisphere, very few countries have regulations, periodic inspections and licensing procedures of mammography centers. We stress this aspect of quality control. Europe, USA, and Australia have large numbers of immigrants and descendants of Lebanese and Arabic origins, and these data may relate to them as well. Breast cancer study and screening in Europeans, American and Australians of Arabic descent and immigrants is necessary to detect similarities, changes and may prove to be important for their management.

457 POSTER Breast cancer epidemiology in Iranian women

A. Abdollahi, H. Tavangar. Azad University, Tehran Medical Unit, Tehran, Iran

Breast cancer is the third most prevalent cancer in Iranian women, hence one of the leading causes of death. What makes it different in Iran from Europe is the early onset of the disease. Therefore, we conducted this descriptive study to figure out the pattern of the disease. In a matter of a year, we studied the hospital files of 2886 patients, who were admitted to governmental hospitals in Tehran, and referral hospitals of selected provinces in Iran from 1986–1996.

From age point of view, we categorized patients in 6 age groups starting from 20 years old on. Although the trend is nearly the same as what we see in Europe, the peak age is about ten years earlier, in women aged 40–49

Unfortunately, it takes a long time before women seek medical help when they first find a symptom. Only 4% of patients went to the hospital in less than a month after the first symptom appeared. For most of them (32%) it took 1–3 months.

The chief complaint was finding a lump in breast (76%). Some patients had two chief complaints, tumor and another one (12%). Axillary adenopathy was another common finding in these patients (53%).

Despite the changes in breast cancer surgery, Modified Radical Mastectomy was still the most common form of surgery in these patients. Conservative surgery accounts for 13% of all surgeries.

The last item which we studied was the pathologic report where the invasive ductal cell carcinoma accounts for 84% of all tumors.

All in all breast cancer starts earlier in Iranian women, and it takes longer for them to seek medical treatment. Early onset of the disease, higher stage, and late medical treatment are the supposed reasons for the radical surgery. We recommend that a national project start to screen young women, who are likely to get the disease at a younger age.

458 POSTER

Hereditary ovarian cancer in Poland

J. Menkiszak¹, J. Gronwald², B. Gorski², A. Jakubowska², T. Huzarski², T. Byrski², S.A. Narod³, <u>J. Lubinski²</u>. ¹Pomeranian Medical University, Department of Surgical Gynecology and Gynecological Oncology of Adults and Adole, Szczecin, Poland; ²Pomeranian Medical University, International Hereditary Cancer Center, Szczecin, Poland; ³Centre for Research on Women's Health, Sunnybrook and Women's College Health Sciences Centre, Toronto, Canada

There is increasing evidence that hereditary factors play a greater role in ovarian cancer than in any of the other common cancers of adulthood. This is attributable, to a large extent, to a high frequency of mutations in the BRCA1 or BRCA2 genes. In Poland, 3 common founder mutations in BRCA1 account for the majority of families with identified BRCA mutations. Our study was conducted in order to estimate the prevalence

of any of 3 founder BRCA1 mutations (5382insC, C61G and 4153delA) in 364 unselected women with ovarian cancer, and among 177 women with ovarian cancer and a family history of breast or ovarian cancer. A mutation was identified in 49 out of 364 unselected women with ovarian cancer (13.5%) and in 58 of 177 women with familial ovarian cancer (32.8%). The majority of women with ovarian cancer and a BRCA1 mutation have no family history of breast or ovarian cancer. The high frequency of BRCA1 mutations in Polish women with ovarian cancer supports the recommendation that all Polish women with ovarian cancer should be offered testing for genetic susceptibility, and that counseling services be made available to them and to their relatives. It is important that mutation surveys be conducted in other countries prior to the introduction of national genetic screening programs.

459 POSTER Laparoscopic oophorectomy combined with breast surgery for

breast cancer patients

M. Carmon¹, O. Olsha¹, B. Zuckerman², E. Levy-Lahad³, L. Rivkin¹,

D.B. Odenheimer¹, U. Beller². ¹Shaare Zedek Medical Center,

Surreny, Jeruselem, Israel: ²Shaare Zedek Medical Center, Gynecology

D.B. Odenheimer¹, U. Beller². ¹ Shaare Zedek Medical Center, Surgery, Jerusalem, Israel; ² Shaare Zedek Medical Center, Gynecology, Jerusalem, Israel; ³ Shaare Zedek Medical Center, Medical Genetics Unit, Jerusalem, Israel

Background: Prophylactic oophorectomy has been shown to be effective in reducing both breast and ovarian cancer incidence for patients with hereditary breast/ovarian cancer syndromes due to BRCA1 and BRCA2 mutations. Oophorectomy in a woman with breast cancer might also be done as a diagnostic or therapeutic procedure for ovarian pathology discovered during pre-operative work-up. We carried out a study of breast cancer patients who underwent the combined procedure of bilateral laparoscopic oophorectomy and breast surgery to determine the short-term outcome.

Methods:From November 2000 until June 2003, 14 breast cancer patients had breast surgery combined with bilateral oophorectomy in our institution. One of these women had a total abdominal hysterectomy as well, leaving 13 with breast surgery and bilateral laparoscopic oophorectomy in the same operating room session. The files of these women were analyzed retrospectively.

Results: The mean age of the 13 women was 50.6 years (range 39–61). Six women had known BRCA1 or BRCA2 mutations, 3 women had suspected ovarian pathology, 1 had a family history of ovarian cancer and 3 others had a family history suggestive of hereditary breast cancer but no known mutation. There were no ovarian malignancies on histological examination of the resected ovaries. The mean operating time was 163 minutes (SD±62, range 40–240), and the mean hospital stay was 2.8 days (SD±1.9, range 1–7). No complications were noted for any of the patients and discharge dates were determined by rate of recovery from the breast surgery only. Time from date of surgery to date of 1st chemotherapy was 26.1 days (SD±5.8, range 22–37), or 3.7 weeks (SD±0.8).

Conclusions:It is obvious that laparoscopic oophorectomy done at the time of breast surgery will avoid the need for a second hospital admission, operating room session and anesthetic at the cost of slightly extended operating time. Combining laparoscopic oophorectomy with oncologic breast surgery is a reasonable treatment option that does not cause an increase in the complication rate. The time to start of chemotherapy did not extend beyond 6 weeks in our series. Time to discharge seems to be determined only by the breast component of the surgery. This approach should be considered for any breast cancer patient undergoing breast surgery who might require oophorectomy as well.

Friday, 19 March 2004

16:00-17:15

PROFFERED PAPERS

Ductal and lobular carcinoma in situ

460 ORAL

Ductal carcinoma in situ of the breast in the Netherlands

Cancer Institute. Outcome of 403 cases over the period 1986–2002

P. Meijnen¹, J.L. Peterse², E.J.T. Rutgers¹, H.S.A. Oldenburg¹. ¹The Netherlands Cancer Institute, Surgery, Amsterdam, The Netherlands; ²The Netherlands Cancer Institute, Pathology, Amsterdam, The Netherlands

Background: The aim of this study is to analyze the outcome of 403 cases of ductal carcinoma *in situ* (DCIS) treated with excision alone, excision plus radiotherapy, or mastectomy over the period 1986–2002. The impact

462

of clinical, pathological and treatment characteristics were evaluated with respect to risk on recurrence.

Methods and Materials: Four hundred and three (403) cases of DCIS underwent surgery at the Netherlands Cancer Institute/Antoni van Leeuwenhoek hospital (NKI/AvL) from January 1986 to December 2002. All patients with 'pure' DCIS and no prior history of breast cancer were included.

The clinical and pathological characteristics evaluated were: age, detection method, biopsy method, number of surgical procedures, completeness of excision and histological grade.

The main endpoints of this study were local recurrence, either invasive or non-invasive, metastasis, and breast cancer-specific mortality.

Results: One hundred and sixty five patients (41%) were treated with breast-conserving therapy, 97 (24%) with excision alone, and 68 (17%) with excision plus radiotherapy, and 238 (59%) with mastectomy. Median age was 51.0 years (range: 24–81 years).

At a median follow-up of 5.3 years, 20 events occurred. Eight patients (8.2%) had local recurrence in the excision alone group, 7 patients (10.3%) in the excision plus radiotherapy group and 5 patients (2.1%) in the mastectomy group (4 local and 1 distant). Median time to recurrence was 2.9 years for all groups. Four (1%) patients died of invasive breast carcinoma after recurrence after a mean follow-up of 4.4 years.

Histological differentiation grade of primary tumour and margin status are not equally distributed. The poorly differentiated and margin positive tumours are more present in the excision plus radiotherapy group than in the excision alone or mastectomy group, 62/25% vs. 27/18%, and 51/4% respectively.

Contralateral breast cancer developed in 7 (7.2%), 2 (2.9%) and 12 (5%) cases in the excision alone, excision plus radiotherapy and mastectomy group respectively.

Conclusion: Breast cancer relapse rates in this series are according to generally accepted standards. The differences in risk factors between the three treatment modalities may reflect physician preferences, resulting in a relatively large proportion of patients treated with mastectomy (with either simple or skin-sparing reconstruction).

461 ORAL

Outcome after invasive recurrence in patients with ductal carcinoma in situ of the breast

D.R. Holmes¹, L. Romero¹, L. Klein¹, R. Soni¹, M. Lagios², M. Silverstein¹. ¹University Southern California Norris Comprehensive Cancer Center and Hospital, Breast Surgery, Los Angeles, USA; ²The Breast Cancer Consultation Service, Tiburon, USA

Objective: Local recurrence (both invasive and non-invasive) has always been used as the most important marker of treatment failure for patients with ductal carcinoma in situ (DCIS). As follow-up lengthens, additional endpoints become increasingly important. Chief among these endpoints are distant recurrence and breast cancer specific fatality caused by invasive recurrence.

Methods: A prospective database was used to analyze 1136 nonrandomized patients treated for DCIS. Endpoints included invasive and noninvasive local recurrence, distant recurrence, breast cancer specific fatality and overall fatality. All recurrence and fatality data were 10 year actuarial (Kaplan-Meier).

	Excision + Radiation	Excision Only	Mastectomy
Number of Patients (n=1136)	286	444	406
Total Recurrences (n=129)	51	73	5
Invasive Recurrences (n=57)	26	27	4
Distant Metastases (n=11)	7	2	2
Breast Cancer deaths (n=8)	6	2	0
Average DCIS Size	19 mm	16 mm	43 mm
10-Yr Local Recurrence Rate	18%	30%	1.8%
10-Yr Distant Recurrence Rate	2%	1.2%	1%
10-Yr Breast Cancer Specific Fatality	2%	0.7%	0%
10-Yr Overall Fatality (all causes)	8%	8%	9%

Conclusions: These results indicate that most patients with DCIS who recur can be salvaged, regardless of their initial treatment. For the small subgroup of patients who recur with invasive breast cancer, mortality rate is similar to patients with T1a or T1b node negative (Stage 1) primary breast cancer.

ORAL

Ductal carcinoma in situ (DCIS) in elderly women. Results according to treatment

B. Cutuli¹, C. Lemanski², C. Cohen-Solal-Le Nir³, B. De Lafontan⁴, L. Gonzague-Casabianca⁵, H. Mignotte⁶, H. Auvray⁷, S. Giard⁸, C. Charra-Brunaud⁹, P. Quetin¹⁰. ¹ Polyclinique de Courlancy, Radiation Oncology, Reims, France; ² Centre Val d'Aurelle, Radiation Oncology, Montpellier, France; ³ Centre Huguenin, Radiation Oncology, Saint Cloud, France; ⁴ Institut Regaud, Radiation Oncology, Toulouse, France; ⁵ Institut Paoli-Calmette, Radiation Oncology, Marseille, France; ⁶ Centre Berard, Surgery, Lyon, France; ⁷ Centre Perrin, Radiation Oncology, Clermont Ferrand, France; ⁸ Centre Lambret, Surgery, Lille, France; ⁹ Centre Vautrin, Radiation Oncology, Nancy, France; ¹⁰ Centre Strauss, Radiation Oncology, Strasbourg, France

Background: To evaluate the outcome in elderly women with DCIS treated in current clinical practice.

Material and Methods: From January 1985 to December 1996, 1223 women with pure DCIS were treated in 9 French Cancer Centers, by mastectomy (M): 358 (29%), conservative surgery alone (CS): 265 (22%) or conservative surgery with radiotherapy (CS+RT): 600 (49%). 76 (6.2%) women were 70 years old or more (70–75 y: 52; 76–80 y: 17; >80 y: 7), with a 73.3-year median age. The median follow-up for this group was 74.8 months (versus 94 months for the entire cohort). These patients were treated by M: 26 (34%), CS: 18 (24%) and CS+RT: 32 (42%). A family history of breast cancer (BC) was reported in 28% of the cases, and 54% of the lesions were discovered by mammography. 27 out of 76 (35%) lesions were comedocarcinoma subtype.

Results: the 6-year local recurrence (LR) rates were 3.8% (1/26), 22% (4/18) and 0% (0/32) in M, CS and CS+RT groups, respectively (p=NS). Three were in situ LR and two were invasive. No nodal recurrences were observed. Only one woman developed metastases after an invasive LR. Five women developed a contralateral BC and two a second cancer.

Conclusion: Clinical and histological features of DCIS in elderly women are quite similar to those observed in younger women, as well as treatment modalities distribution. CS+RT leads to a particularly excellent local control in elderly patients, as well for DCIS as for infiltrating carcinoma.

463 ORAL

Ductal carcinoma in situ (DCIS) – the role of prognostic indicators in informing treatment and reducing local recurrence

M.G. Wallis¹, K.E. Clements², J.M. Macartney³, M.R. Lee⁴, G.M. Lawrence⁵, M.E. Wheaton⁶, O. Kearins⁷, H.G. Bishop⁸. ¹University Hospital Coventry&Warwickshire, UK; ²West Midlands Cancer Intelligence Unit, Birmingham, UK; ³University Hospitals Coventry&Warwickshire Nhs Trust, Coventry, UK; ⁴University Hospitals Coventry&Warwickshire Nhs Trust, Coventry, UK; ⁵West Midlands Cancer Intelligence Unit, Birmingham, UK; ⁶University Hospitals Coventry&Warwickshire Nhs Trust, Coventry, UK; ⁷West Midlands Cancer Intelligence Unit, Birmingham, UK; ⁸Royal Bolton Hospital, Bolton, UK

The incidence of Ductal Carcinoma *In Situ* (DCIS) has risen dramatically in the West Midlands since the introduction of the National Health Service Breast Screening Programme (NHSBSP). There is a wide variation in treatment provided to these patients and uncertainty as to the best management policy to follow.

840 cases of DCIS diagnosed during the period 1st April 1988 – 31st March 1999 were identified in 10 breast screening services in the West Midlands. Treatment and follow-up data were collected from hospital case notes and from the West Midlands Cancer Intelligence Unit's cancer registration database. A pathological slide review was undertaken by a consultant pathologist to provide consistent information on diagnostic characteristics. A radiology review of the diagnostic X-ray films was undertaken to gain information on particular radiological characteristics of these patients. 624 cases were identified with a full pathology dataset and 718 cases with a full treatment dataset. The 586 cases with both a full pathology and treatment dataset were then subjected to radiological review. After further exclusions, cases with a full radiology, pathology and treatment dataset were then analysed. Followup data were attained for a maximum of 14 years and a minimum of 3 years.

Data will be presented which link the radiological characteristics, pathological findings, treatment methodologies undertaken and resultant outcomes in terms of time to local recurrence. There were 72 recurrences overall of which 54 were local (ipsilateral or bilateral) giving a local recurrence rate of 9.22%. Mean time to local recurrence was 35.65 months and this figure differed depending on margin status, surgical procedure, and