

screening examination. The questionnaires had been designed to identify women with moderate to high risk of hereditary breast cancer. The same questionnaires were subsequently completed again by physicians who personally obtained the answers from each of the 234 women. The self-compiled questionnaires were compared to the physician-compiled questionnaires.

Results: 47 (20%) of the self recorded questionnaires, those fulfilled without the aid of a physician, were either incomplete or contained errors.

Conclusions: Complete and accurate family history data are required to identify women with moderate to high risk of hereditary breast cancer. We believe that a significant percentage of women who are asked to complete these questionnaires without the assistance of physicians or other appropriately trained health care personnel are not able to completely or accurately supply the information which we require. Therefore we recommend that appropriately trained personnel assist all women who are asked to fulfil the questionnaires.

453

POSTER

Male breast cancer. A ten year (1992–2001) review of 99 cases

L. Sarakauskienė, V. Tiknius, V. Puodžiūnas, G. Butkus. *Kaunas University Oncological hospital, Breast cancer, Kaunas, Lithuania*

Introduction: although it occurs infrequently, breast cancer can affect men as well as women. Cases are rare in many countries, average of annual incidence of 1 case for every 100,000 males. In Lithuania annual number per year is 6.4 of breast cancer for males and 1051.6 for female. In overall cancer incidence it takes 0.1 for males and 17.8 for females. Age standardized rate per 100,000 is 0.3 for male and 37.7 for female. The risk factors are: familiar status, previous benign breast disease radiotherapy, family history, liver disease and testicular pathology.

Patients and methods: 99 male breast cancer patients in Lithuanian oncological hospitals and departments of oncology in 1992–2001 year were studied. Statistical data was extracted from Lithuanian cancer register clinical information from patients case histories either by correspondence with the hospital. Follow-up information was obtained for 92 patients.

Results and conclusions: The incidence of breast cancer in men like breast cancer in women increases with age, but is rare before age 35, what is not so infrequent for women. Men older than 60 years makes 87.7% of incidence. This can be explained that in older men growth of breast tissue can be stimulated by several commonly used drugs, widely prescribed for cardiovascular like high blood pressure, cirrhosis of the liver and others comorbid diseases. All histological types of breast cancer common for women, can occur in men, although some – as lobular carcinoma are quite rare, because lobules are normally absent in the male breast. In our study infiltrating ductal carcinoma was in 86.8% and invasive lobular carcinoma only in 2.0%. A man's prognosis like a woman is influenced by the stage of the disease at the time of diagnosis. In our study 39.3% of patients was in stage II and 46.6% stage III. By tumors, larger than 3 cm axillary lymphnodes were involved in 41.9%. For assessment of survival rate evaluated the 1993–1997 year cases.

	Males	Females
Average annual number of breast cancer registered	6.4	1051.6
Average of annual breast cancer deaths	3.4	551.8
Average breast cancer death in first year after diagnosis	1.2	194.6
Relative survival rates (age standardized rates %)		
1 year	77	81
2 year	59	74
5 year	53.9	61.1

Till now little is known about psychosocial problems that men face in adjusting to breast cancer. Having a disease that is predominantly female and one that involve hormone imbalances, might be seen as a threat to the patients masculinity. And such condition could leave him feeling particularly alone and helpless. The male population of our society needs information about existing of this disease and that, like others cancers, it can be cured or controlled if is diagnosed and treated in time.

454

POSTER

Population screening for cancer family syndromes in West-Pomeranian Region of Poland with 1.7 mln inhabitants

J. Lubinski¹, A. Raczynski¹, M. Tarhoni², M. Blachowski², J. Gronwald¹, T. Huzarski¹, T. Byrski¹, A. Toloczko-Grabarek¹, T. Debiak¹, C. Cybulski¹. ¹Pomeranian Medical University, International Hereditary Cancer Center, Szczecin, Poland; ²West-Pomeranian Insurance Company, Szczecin, Poland

The largest worldwide population screening for cancer family syndromes has been initiated in January 2001 in West-Pomeranian region of Poland

with 1.7 mln of inhabitants. Program is supported by EU project (QLRI-CT-1999-00063) and by Regional Health-Care Insurance Company with 1.5 mln of members. In the period of Jan–Dec 2001 family doctors and nurses collected questionnaires asking about cancer family history among I and II degree relatives – 1 mln of individuals. Specialists – genetics/oncologists – selected about 2% of screened in individuals – 1–2 representative persons per family – for detailed examination and DNA/RNA analyses the following syndromes were established definitively or with high probability: hereditary breast/ovarian cancer – 1634 families including 291 with BRCA1 mutation, hereditary colorectal cancer – Lynch syndrome – 341 families, hereditary stomach cancer – 592 families. Other type of syndromes (strong aggregation of malignancies) were diagnosed in 2456 families. Appropriate management has been introduced in all identified families with high predisposition to malignancies.

455

POSTER

Problems of breast cancer diagnosis during pregnancy and lactation

A. Parokonnaya¹, M. Nechushkin¹, E. Polevaya², A. Petrovsky³. ¹Russian Cancer Research Center, Radiosurgery, Moscow, Russian Federation; ²Russian Cancer Research Center, Breast Cancer, Moscow, Russian Federation; ³Moscow Sechenov Medical Academy, Oncology, Moscow, Russian Federation

The most common neoplasm in pregnant and postpartum women is breast cancer. There is increasing firmness, edema and hypertrophy during pregnancy, which may hide the presence of the breast tumor.

101 women with pregnancy-associated breast cancer were studied between 1974 and 1995. All patient had some difficulties with diagnosis and term of its determination.

In 80 cases patients found their tumors by self-examination, in 17 – during routine prenatal examination by doctors and in 3 patients – during routine breast ultrasound.

The most common symptoms were – palpable lymph nodes, unilateral increase of mammary gland sizes, unusual liquid from nipple, areola edema.

Only half of all patients applied for medical help after finding tumor masses. 77 patients had an average interval of 6 months from symptoms to diagnosis.

25 patients had tumors about 10 cm. 20 patients tumor size was more than 10 cm. (up to 27 cm in one case). Only 10 patients had tumors less than 2 cm.

456

POSTER

Increased age adjusted incidence rates in younger-aged groups at presentation. In Lebanon and Arab countries. Implications for screening and for Europeans, Australians and Americans of Arabic origins

N.S. El Saghir. *Clinical Associate Professor of Medicine American University of Beirut Medical Center, Beirut, Lebanon*

Background: Breast Cancer is the most common malignancy in women. International variations in etiologic factors, ages distributions and stages of disease vary greatly. In the United States and Western Europe, approximately 50% of all women with newly diagnosed breast cancer are older than 65 years, while in Lebanon and other developing countries, a trend of younger women at presentation is noted. In the Western hemisphere, there is a higher number of very early stages and in-situ cases at presentation, while in most developing countries there is a higher percentage of locally advanced and metastatic disease at presentation, and more radical surgeries and less breast-conserving surgeries are still being done for operable breast cancer.

Materials and Methods: Cancer registry at the American University of Beirut, and data from other hospitals in Lebanon are presented. American University Hospital sees one third of cancer patients in Lebanon. Patients name, sex, address, age at presentation, histological type of cancer and International Classification of Diseases ICD-O codes were entered and analyzed. Results were calculated as number and proportion of cases, 10-year age-specific incidence rates, crude rates and age standardized rates (ASR) per 100,000 population. The ASR per 100,000 population was estimated by the direct method with the use of the World Standard Population.

Results: Breast cancer is the most common cancer in Lebanese women. Lebanon has a total population of about 3.5 to 4.0 millions with an estimated total number of 3500 new cancer cases annually. Between 1983 and 2000, we saw 16,421 cancers of which 8007 were in women. Breast cancer constituted 33% of all female cancers. There were 2673 female breast cancers, averaging 148 cases per year (Range: 94–202). 49.1% were in women below the age of fifty. Mean age was 49.8 years \pm 13.9. 49% of cases. Age Standardized Incidence Rates (ASR) were calculated using the world standard population was 30.6, for a crude rate of 27.7. Peak

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, J. Lubinski². ¹*Pomeranian Medical University, Department of Surgical Gynecology and Gynecological Oncology of Adults and Adolescents, Szczecin, Poland;* ²*Pomeranian Medical University, International Hereditary Cancer Center, Szczecin, Poland;* ³*Centre 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. 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. ¹*The Netherlands Cancer Institute, Surgery, Amsterdam, The Netherlands;* ²*The 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