4007 POSTER

Advanced age, vulnerability/frailty and presence of comorbidities are associated with a delayed diagnosis made more by self examination than screening mammography in older breast cancer women: results of a prospective observational trial in 5 Italian centers

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Background: Analyses carried out by the Surveillance Epidemiology and End Results program (SEER) indicate that the rate of death from breast cancer (BC) in elderly women correlates with the stage of disease at first diagnosis and with the number of coexisting diseases at this time. In older women barriers to regular screening through screening mammography may originate from the patient herself, from the primary care physician or from the organisation of the health system.

Patients and Methods: A prospective observational study involving 5 Italian centers evaluated the determinants of the choice for adjuvant treatment in women aged ≥70 years with BC. In this setting we also made an analysis on the impact of age and frailty/vulnerability at Multidimensional Geriatric Assessment (MGA) on modality of initial diagnosis and the T stage.

Results: 301 women had complete data to be considered eligible for this analysis. Sixty-five percent of T1 tumours were recorded in patients younger than 80 years compared to 34.4% in older patients (p < 0.005). The initial diagnosis was made in 128 cases (43%) with screening mammography, in 145 (48%) by self examination of the breast, while in 28 cases (9%) was an incidental finding during clinical examination for other problems. Increasing age correlated with reduction of diagnoses made with the screening mammography compared to self examination, while the percentage of the incidental diagnoses remained low (table). With regard to MGE, diagnosis with screening mammography was more frequent in fit patients (58.6%) compared to vulnerable/frail patients (40.9%, p < 0.0001), while the presence of relevant comorbidities had weak association with diagnosis by self examination (p = 0.045).

Conclusion: In our series of elderly women increasing age correlated with larger diameter of breast cancer and reduced access to screening mammography. Vulnerability/frailty and presence of comorbidities were associated with delayed diagnosis, made more frequently by self examination, compared to early diagnosis by mammography. No age alone but a full MGA should guide in the decision of proposing screening mammography to elderly women.

Age Groups	Screening mammogram		Self examination		Incidental diagnosis		Total	
	pts	%	pts	%	pts	%	pts	%
70−75	80	56.3	55	38.7	7	4.9	142	100
76−80	37	42.0	40	45.5	11	12.5	88	100
81−85	9	16.4	37	67.3	9	16.4	55	100
>85	2	12.5	13	81.3	1	6.3	16	100
Total	128		145		28		301	

4008 POSTER

Risk factors for breast cancer in elderly women – retrospective analysis of 206 patients

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Background: Breast cancer (BC) is the most frequent cancer in women, and its incidence varies widely by geographic region. Several risk factors (RF) have been reported, including personal, familial and reproductive history, and hormonal and medical factors, but their weigh is different according to age. The aim of the study was to evaluate retrospectively the importance of RF for BC in elderly women, all residing in the Northeast of Italy.

Patients and Methods: The study population included 102 elderly (>65 years) women (median age 72 years, range 65−87) with confirmed primary BC (cases), and 104 population-based age-matched patients (controls), who underwent physical breast examination and routine mammography. Patients with previous malignancies were excluded. The following parameters were considered: age, family history of BC, menstrual and reproductive data (age at menarche, menstrual pattern, number of births and abortions, age at first birth, lactation), use of oral contraceptives and hormonal replacement therapy, body mass index (BMI).

Results: In the univariate analysis we found significant (p < 0.01) differences between cases and controls with regard to: (1) age at menarche (12.3±1.6 vs. 13.1±1.6 years) and menopause (49.1±4.6 vs. 48.3±3.6 years), (2) years between menarche and menopause (13.0±4.7 vs. 11.2±4.1 years), (3) number of births (1.4±1.2 vs. 1.8±1.3), (4) estrogen replacement therapy (ERT) (39.6±29.2 vs. 33.7±28.0 months). Multivariate analysis using a logistic regression model showed that only three independent parameters correlated with BC: age at menarche, number of births, and months of ERT. The Odds ratio (OR) for BC calculated from the observed vs. predicted values obtained using the logistic regression function was 5.05 (95% CI 3.6−7.1), while the OR of single variables was <2.5 (95% CI 1.51−3.32).

Conclusions: There was a significant relationship between prolonged (>3 years) use of ERT and risk of having BC in elderly women. However, the direct role of estrogens in BC is still unclear. On the other hand, most of the classic RF (i.e. lactation, oral contraceptive use, family history of BC, BMI > 24) were not associated with BC, suggesting that in the selection of a high-risk population in each geographic area other parameters should be considered.

4009 POSTER

Aspects of age and gender in geriatric assessment in elderly cancer patients

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Background: Geriatric assessment (GA) must be integrated into treatment concepts and decision algorithms in elderly cancer patients. Aim of this study was to investigate the impact of age and gender in geriatric assessment (GA) in tumor patients.

Material and Methods: GA was applied in 78 tumor patients 60+, treated at the ward of the Department of Internal Medicine V (Hematology and Oncology), Medical University, Innsbruck, Austria, to assess the domains functional capacities, comorbidities, quality of life, cognition and social support.

Results: In this cohort women were older (median 75 yrs) than men (72 yrs) (p < 0.03). A trend towards a gender effect was observed in iADL (Instrumental activities of daily living) as women displayed better functional activities than men: iADL (median 8 vs 6) p = 0.063; this effect even increased in age adjusted analysis (p = 0.05). In contrast the Timed up and go test was performed faster by men (14.22 seconds) than by women (10.35 seconds) (p = 0.048); however, this difference was less pronounced in age adjusted models (p = 0.0889). Interestingly social support was somewhat lower in women and was not age-dependent (F-Sozu 4.23 vs 4.53, p = 0.094). In WHO-Scale, Karnofsky Index (KI), Activities of Daily Living (ADL), Mini Mental State Examination (MMSE), Geriatric Depression Scale (GDS-30), Cumulative illness rating scale for geriatricians (CIRS-G), Charlson Comorbidity Index, VES-13, PPT, FACT-G no gender effects were observed.

Conclusions: These results emphasize the fact, that gender differences should be considered and recognized in the comprehensive evaluation of elderly tumor patients.

4010 POSTER

Role of adjuvant chemotherapy in elderly (≥70 years) women with high-risk early breast cancer

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Background: Women older than 70 years have been underrepresented in breast cancer adjuvant chemotherapy (ADJCT) trials due to concerns about toxicity, safety and benefits of chemotherapy. Scarce data exist on the effectiveness of ADJCT in these patients (pts).

Methods: Charts of all consecutive elderly pts aged 70 years or more with early breast cancer (T1−4; N1−2; M0) referred to our Institution between 1999 and 2004 were reviewed for tumour stage and treatment. High risk patients were identified if any of these factors were present: T > 2 cm, Grade 3, N positive and Estrogen receptor (ER) negative status, c-erb-B2 +++. Primary end point was the evaluation of the role of ADJCT in elderly pts with high risk early breast cancer, with regard to overall survival

(OS) and disease free survival (DFS). Cumulative OS and DFS rates were estimated using the Kaplan–Meier product-limit method; comparison of survival curves was performed using log rank test.

Results: 347 pts were eligible. Median age was 74.7 years (70−97); 59% underwent conservative surgery; 81.6% nodal dissection and 7.2% sentinel node biopsy. Tumor characteristics are listed in the table (data not available are not reported).

T	1	179	51.6
	2	134	38.6
	3−4	20	5.8
N	Positive	114	32.8
	Negative	233	67.2
ER	Positive	265	82.1
	Negative	62	17.8
c-erb-B2	+++	40	11.5
	++−, +−−, −−−	157	42.5
Grade	1	69	19.9
	2	150	43.2
	3	90	25.9
Risk	High	234	67.4
	Low	113	32.6
"Triple-negative"		21	6

ADJCT was administered to 100 pts, 96 of whom were high-risk, and 13 were "triple-negative". At a median follow-up of 64 months, high risk patients presented poorer OS compared to low-risk pts (73.6% vs 88.8%, $p = 0.009$). Chemotherapy in high risk pts, globally considered, did not seem to influence survival, whereas node positive pts who underwent ADJCT had a better survival ($p = 0.01$), though in both cases median has not been reached yet.

As for DFS, again high risk was associated with increate rate of relapse ($p = 0.03$).

ER-negative tumors and use of chemotherapy were not correlated with difference in survival, yet also in this case median has not been reached. For triple-negative pts (21 pts), too few events verified (2 deaths, 4 relapses) to perform survival analysis.

Conclusions: High risk tumours correlate with reduced survival in elderly pts as well as in younger pts. The benefits of adjuvant chemotherapy are not clear, yet the strongest factor suggesting a role for adjuvant chemotherapy is lymph node involvement. Longer follow-up and prospective studies are needed to define the role of endocrine receptors, given the low representation of ER-negative tumors in elderly pts.

4011 POSTER
Management of breast cancer in the elderly

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Background: Life expectancy is increasing. This is the reason many diseases arise more frequently in elder people. Breast cancer is the first cause of death cancer-related in female, with an incidence rising. The aim of this study was to analyze some features of breast cancer and compare them into two groups of age, in order to evaluate the disease behaviour in different life's states.

Material and Methods: 300 women underwent surgery between 1992 and 2006 after diagnosed of breast cancer in our Department. We collected some variables related with risk factors, tumour features, diagnosis methods and treatment. A descriptive study took place first, and afterwards we divided patients into two groups, according to the age: 70 years-old or younger and elder than 70. We carry out statistical analyze with SPSS 11.5 software.

Results: Breast cancer in young women was under the influence of risk factors related with hormonal action and familial cancer history. Ancient women showed more advanced tumours, except for the number of lymph nodes, which is major in younger women. They presented as well a larger rate of clinical diagnosis and they were less diagnosed via exclusively radiological methods (14.98% vs 5.95%). In surgical treatment, we observed that mastectomy was carried out in our institution more frequently in women elder than 70 years-old (79.76%), and on the other side conservative treatment was undertaken in younger women. Only statistically significant results are shown ($p < 0.05$).

Conclusions: Risk factors in breast cancer are kept through the life with a decrease of their impact in elder women. According to our results, ancient patients show advanced tumours. The delay of the diagnosis, associated with a worse fulfilment of the follow-up, as well as a less standardized practices of mamographic screening, can justify this fact. We have observed

that conservative surgery undergoes in a larger rate of young women, meanwhile radical surgery is more frequent in elder women.

4012 POSTER
Adjuvant docetaxel and cyclofosfamide in breast cancer patients over 65 years: compliance and toxicity

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Background: Adjuvant taxane-containing regimens have been proved to increase survival among breast cancer patients. However, elderly breast cancer patients are rarely offered adjuvant chemotherapy, because they have been under-represented in formal clinical trials and insufficient data on toxicity profile are available.

Materials and Methods: Records for patients ⩾65 years treated with docetaxel $75 \, \text{mg/m}^2$ and cyclofosfamide $600 \, \text{mg/m}^2$ intravenously every 3 weeks for 4 cycles since 2006 were reviewed. Patients with metastatic/recurrent disease or prior treatment were excluded. Adverse events were assessed at each visit and graded according to the NCI-CTC v 3.0.

Results: A total of 20 pts, median age 73 years (range 65−84), were identified. WHO performance status was 0/1 in 100% of cases. Patient characteristics, TNM and tumor imunohistochemical profile are reported in Table 1. Treatment was well tolerated with a total of 57 cycles administered. Among hematological toxicities, grade 3 and 4 neutropenia occurred in 2 of 20 pts; severe anemia and thrombopenia were not observed; 4 patients experienced grade 1 anemia. Main non-hematological toxicities included grade 1: conjunctivitis (1/20) and skin rash (1/20) and fluid retention (1/20); grade 2: astenia (6/20), nausea and vomiting (2/20); mucositis (4/20); sensory neuropathy (2/20); grade 3: astenia (1/20) and lung injury (1/20). Treatment was ongoing for 2 patients at the time of data collection of this analysis.

Conclusion: These preliminary data indicate that adjuvant docetaxel and cyclofosfamide is a feasible and well tolerated option for elderly breast cancer pts. Un update will be provided.

Table 1.

Age (Median)	73 (65−84)	
Stage at Diagnosis		
Stage I	6	30%
Stage IIA	10	50%
Stage IIB	1	5%
Stage IIIA	1	5%
Stage IIIB	1	5%
Stage IIIC	1	5%
Estrogen Receptor		
Positive	18	90%
Negative	2	10%
Progesterone Receptor		
Positive	14	70%
Negative	6	30%
HER2 status		
Positive	2	10%
Negative	18	90%

4013 POSTER
Knowledge of prescription medications among elderly cancer patients

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Studies have shown that the elderly do not possess essential knowledge about the medications they consume. This may lead to many problems such as increased medications errors, adverse effects, morbidity and mortality. This study aims to assess the knowledge of elderly (⩾65 years old) cancer patients on their home prescription medications and determine the extent of safe medication-use practices.

This is a cross-sectional study of elderly patients attending outpatient clinics at the National Cancer Centre Singapore (NCCS). Patients were interviewed on their prescription medications taken at home and safe medication-use practices. Informed consent was taken prior to initiation of survey and conducted in language understood by patients. Medications