Methods: Their files were retrospectively reviewed in order to compare the clinical features, pattern of presentation and outcome of patients in the two ethnical subgroups

Results: Median age was 66.3 years (29−93) in the Jewish population and 54 years (25−86) in non-Jewish patients. 60% of Jewish patients presented with stage I disease, 24% with stage II, 2% stage III and 14% with metastatic disease. In the non-Jewish population only 39% presented with stage I, 35% stage II, 6% stage III and 20% stage IV. Invasive ductal carcinoma was the prevalent histology in both groups (81%).

Worse pathological risk factors were more frequent present in the non-Jewish than in the Jewish population: grade III 49% vs 33%, vascular invasion 18% vs 9% and perineural invasion in 7% vs 5%. Hormonal receptors positive disease was present in 82% in Jewish and in 72% of non-Jewish patients and HER2/neu positive disease was present in 18% of Jewish and 31% non-Jewish patients.

Lumpectomy/Mastectomy rate was similar in the two subgroups (4.4). More non-Jewish patients had adjuvant chemotherapy 64% vs 26%. Median follow-up was 51 months (1−93). Median PFS was 29 months in the Jewish population and 20 in non-Jewish patients. 11% of Jewish and 18% of non-Jewish patients died of breast cancer during the follow-up period.

Conclusion: Non-Jewish breast cancer patients are diagnosed at younger age and present with more aggressive and advanced disease than Jewish patients. Their prognosis is obviously worse. This fact has to be considered when national screening guidelines are generated.

0226 Report of Cowden's syndrome in patient with PTEN mutation

I. Melbarde-Gorkusa[1], A. Irmejs[1], E. Miklasevics[1], I. Strumfa[1], B. Vagule[2], I. Grinfelde[3], J. Gardovskis[1], S. Subatniece[1], A. Gardovskis[1]. *[1]Hereditary Cancer Institute, Riga Stradins University, [2]Radiology department, Stradins Clinical University Hospital, [3]State Medical Genetics Centre, Children's Clinical University Hospital, Riga, Latvia*

Goals: PTEN Hamartoma Tumor syndrome is an autosomal dominant disorder that includes Cowden's syndrome as an uncommon disorder with an estimated incidence of 1 per 200,000 of the population, at least in Europe and North America; the syndrome confers an increased risk of breast, thyroid, and endometrial cancer. Other features of the disorder include the following: macrocephaly, gastrointestinal polyps, benign breast, thyroid and endometrial manifestations; and characteristic mucocutaneous lesions.

In female patients the syndrome is associated with up to a 50% lifetime risk of developing breast cancer, a 5−10% risk of developing endometrial cancer, and a 10% lifetime risk of developing follicular thyroid cancer. Germline PTEN mutations of patients with Cowden syndrome are found in 85%.

We present the first case of Cowden's syndrome in Latvia.

Methods: A 34 years old woman was established as having provisional diagnosis of Cowden's syndrome. Her physical examinations revealed macrocephaly, keratosis, lipomatosis and gastric polyposis. She had thyroidectomy because of struma nodosa and breast fibradenomas surgery in anamnesis. Breast MRI diagnosed new multiple bilateral fibradenomas. Also endometrial adenocarcinoma was detected. Consequently hysterectomy with bilateral salpingo-oophorectomy was performed. PCR and automated sequencing of the entire coding region of the PTEN gene were performed.

Results: Sequestration of PTEN/MMAC1 revealed two mutations (Asp24GLy and Tyr27Cys). By PCR notable deletion at exon 8 was found.

Conclusion: Because the most serious consequences of PTEN Hamartoma Tumor syndrome relate to the increased risk of breast cancer, the most important aspect of management of an individual with a PTEN mutation is increased breast cancer surveillance and prevention. Prevention measures for breast cancer in individuals with Cowden's syndrome includes prophylactic bilateral mastectomy which is recommended by multidisciplinary team. In this case the patient has agreed to preventive surgery and operation has been scheduled in nearest months.

0227 Profile of in situ carcinoma of the breast in our hospital

A. Carrascal[1], R. Noguero[1], B. Sancho[1], M. Gallego[1], M. Sanz[1], M. Arroyo[1], S. Aragón[1], M. Blanco[1], M. De Matías[1]. *[1]Gynecology, 12 de Octubre, Madrid, Spain*

Goals: The aim of this study is to evaluate the epidemiological, clinical, histological and treatment features of patients with breast DCIS in the last years.

Methods: A retrospective study was carried in "12 de Octubre" hospital with patients with a pathological diagnosis of CDIS from January of 1997 to December of 2007. The records were reported to the data base of the pathological breast unit, and several variables were analyzed. Statistical analysis was carried out with SPSS 13.0.

Results: Two hundred and three patients were identified, which means 10.85% of the total of breast carcinoma cases. The mean time of following was 4.26 years. Median age of the patients was 55 years (range 30−80) and 62.7% were postmenopausal. The lesion was found thanks to radiological finding in 74.9% of the cases, whereas in 18.2%, the lesion was palpable. Radiological biopsy was the most common method of diagnosis, being chosen in 81.6% of the patients. Mean size of the lesion was 19.6 cm, and comedocarcinoma resulted to be the most frequent subtype. Estrogen receptor was positive in 76.6% of cases. We found microinvasive lesion in 4.4% of patients, multicentred in 5.1% and multifocal in 18%. Ninety seven patients (52.2%) underwent breast conserving surgery and adjuvant radiation, and in 89 patients (47.8%) a modified radical mastectomy was. Tamoxifen was indicated in DCIS receptor positive. A recurrence of the disease has been found in 5.4% of women during the study. 11 patients (5.4%) had recurrent disease, six of them with ispsilateral recurrence (4 cases with invasivity). The rate of ipsilateral recurrence after breast-conservation surgery was 33.3%, with a pattern of inmunohistochemical: estrogen receptor negative in 66.6%, progesterona receptor negative in 66.6%, HERB-2 positive in 50%. 5 patients showed contralateral recurrence of disease (4 invasive, 1 non invasive).

Conclusion: DCIS diagnosis is increasing, thanks to screening programs with mammography. In our experience, it is more frequent in postmenopausal women around 55 years old, most of them with positive estrogenic receptors. The prognosis is excellent with a rate of local recurrence of 5.4% at ten years of follow up.

0228 Multicentre investigation of HER2 expression in 1806 infiltrating carcinomas of the breast in the Chinese population

Z. Lu[1], D. Chen[2], J. Zheng[3], J. Da[4], M. Zhu[5], Q. Li[6], R. Lang[7], W. Sun[8], X. Zhou[9], Y. Liu[10], Y. Sun[11], H. Bu[12], L. Wei[13], J. Chen[1]. *[1]Oncology, Peking Union Medical College Hospital, [2]People's Hospital, Peking University, [3]Peking University Health Science Center, [4]Sino–Japan Friendship Hospital, Beijing, [5]Shanghai Changhai Hospital, Shanghai, [6]Xijing Hospital, Shaanxi, [7]Tianjin Cancer Hospital, Tianjin, [8]Zhejiang Cancer Hospital, Zhejiang, [9]Beijing Friendship Hospital, Beijing, [10]Guangdong Provincial People's Hospital, Guangzhou, [11]Cancer Hospital, Chinese Academy of Medical Science, Beijing, [12]West China Hospital, Chengdu, [13]China PLA General Hospital, Beijing, China*

Goals: Breast cancer is a common disease in China and the incidence is increasing. Trastuzumab (Herceptin®) is an effective therapy for breast cancer patients with human epidermal growth factor receptor 2 (HER2) overexpression. Accurate determination of HER2 status is essential for assessing the eligibility of breast cancer patients for trastuzumab therapy. In order to investigate HER2-expression patterns in the Chinese population, and improve quality control for HER2 immunohistochemistry (IHC) staining, a multicentre study was undertaken in 13 hospitals across China.

Methods: In total, 1806 cases of newly diagnosed breast carcinomas were collected from 1 August 2007 to 31 July 2008 for this study. The HercepTest™ (Dako) anti-HER2 polyclonal antibody was used for IHC staining, following recommended protocols. Scoring of HER2 positivity was performed according to Dako recommendations, with IHC 3+ scores considered to be positive, 2+ scores equivocal, and 1+ and 0 scores negative.

Results: Incidences of IHC 3+, 2+, 1+ and 0 scores were 17.7%, 16.9%, 24.8% and 40.6%, respectively. There was variation in positivity rates between the different hospitals (IHC 3+ range 6−27%), full data for which will be presented.