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Introduction: Nowadays most developed countries in the world, including Russia, experience the increase of breast cancer rate. There has been a steady growth of breast cancer cases from 2002 to 2006 year both in Ugra and in Russia overall (cancer-register materials analysis of Khanty-Mansyisk State Clinical Hospital). At the present time, since February, 7th, 2007, there has been a Screening Program (SP) implemented on the territory of the region that is aimed at early breast cancer diagnostics. SP includes 3 consecutive stages. First stage particularity is based on northern regional aspects – town remoteness from each other and from big cities, absence of oncologists in each town. Gynecologists or medical assistants make a physical breast examination and order instrumental diagnostic. Second stage includes instrumental diagnostics measures. Third stage determines treatment-diagnostics measures performed by oncologists when second stage finds breast pathology.
Goal: Define SP first results with diagnostics equipment performance evaluation in region municipal districts.
Results: The reports have been provided by 21 municipal districts from March till October 2007. 38360 women have been inspected with use of mammography and ultrasound for the period of 8 month, including 18123 within screening program. This number represents around 7% of female population of over-20-years age group. 20575 women, age group over 40 years, have been inspected using mammography, including 11630 within the SP – 56.5% of the total inspections. Ultrasound inspection has been performed on 17785 women, including 6493 within the SP – 36.5% of the total inspections.
Conclusions: Reports analysis in the region has demonstrated SP active implementation in majority of municipal districts. However, it has shown that some districts do not perform sufficient screening inspections even though there is all required equipment in place. Also it indicated 6 districts with no mammography set up or functioning for various reasons. The following measures are required to resolve the above problems: appointment of those responsible for SP implementation in each district; educational courses for medical specialists involved in first stage of SP; sufficient employment of specialists to maintain mammography equipment operations in all municipal districts; telemedicine use in the region for histologist and cytologist consultations when performing verification of breast biopsy results.

P15
Genetic counseling in breast cancer. The National Cancer Institute of Naples experience

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Genetic factors appear to contribute to at least a fraction of 5–10% of the women with breast cancer. Today the recent molecular biology acquisitions lead us to consider different clinical approaches in the treatment of women with higher risk to develop breast carcinoma. In 1994 our Institute started a perspective program (named "Family Project") for genetic counselling on families with higher incidence of breast cancer. 245 women distributed in 93 families have been entered into this study. The only criterion for admission was the presence of breast cancer in at least 3 components of the family. This group was followed by a clinical-diagnostic protocol including anamnesis, genealogical tree reconstruction and clinical and instrumental examinations (ecography, mammography and FNAC where necessary). Peripheral blood samples were taken from each woman and genomic DNA was extracted to further evaluate putative genetic alterations after obtaining informed consent. This approach has permitted discovering pre-clinical lesions in 10 women enrolled belonging to family groups under study. From the first breast cancers analysis we found an hereditary component in 13% of all cases studied and these cases have peculiar characteristics: early age of diagnosis, frequent bilateral tumours, and the association with other tumours in the same person or in the same family group. The follow-up uses a protocol, which foresees the psychological approach, between the clinical team and the women in study, as a fundamental part of it.

P16
The patterns of BRCA1 and BRCA2 mutations in hereditary breast cancer in Ukrainian population

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Breast cancer (BC) is the most common malignancy in developed countries with lifetime risk about 70–90%. It is known, that specific inherited mutation in BRCA1 and BRCA2 (5–10% of overall BC incidence) associated with an extremely high risk of BC development. The most thoroughly studied manifestations of the founder effects are among Ashkenazi Jewish population where three common mutations in BRCA1 and BRCA2 are reported (185delAG, 5382insC in BRCA1 and 6174delT in BRCA2). The aim of the study: To estimate the patterns BRCA1 and BRCA2 mutations of Ukrainian population.
Material and Methods: We analyzed DNA samples of 20 patients with hereditary BC to determine the patterns of founder mutations and other mutations in BRCA1 and BRCA2 genes. We screened the genes BRCA1, BRCA2, and CHEK2 from 20 paraffin samples of Ukrainian patients with BC using gel electrophoresis and direct sequencing.
Results: 517delTG BRCA1 mutation has been found in 5 patients, T300G – in 3 patients, 5385insC – in 3 patients, 6174delT and 5909insA BRCA2 mutations has been found in 1 and 1 patient accordingly. IVS2+1G>A and I157T mutation CHEK2 where found in 4 patients and 3 patients accordingly. So the most frequent BRCA1 gene defects were detected 517delTG and 5382insC (founder mutations) in 5 and 3 patients accordingly. 617delT founder mutations in BRCA2 was identified in only one case.
Conclusion: Founder mutations in Ukrainian populations in our study make up only 15% for BRCA1 and 5% for BRCA2.

P17
The BRCA1 and BRCA2 mutation in Chinese breast cancer patients – a multi-center study of 489 cases

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