

Cumulatively, multivariate Cox regression showed an increased hazard for disease relapse in Arg/Arg carriers (HR=4.19, CI=1.44-12.18, P=0.008). In LEP/LEPR combination genetic profile analysis we found that intermediate/high signalling carriers had higher risk for OvCa relapse (HR=2.49, CI=1.04-5.98, P=0.041), compared with low signalling genetic profile carriers.

Overall survival univariate analysis revealed a shorter survival in Arg homozygous and in intermediate/high leptin/LEPR signalling genetic profile carriers (P=0.001 and P=0.004, respectively). Multivariate analysis showed a worst outcome for LEPR Arg/Arg and intermediate/high leptin/LEPR signalling genetic profile carriers (HR=3.54, CI=1.45-8.64, P=0.005 and HR=3.44, CI=1.52-7.77, P=0.003, respectively).

Conclusions: Functional polymorphisms of the leptin pathway, alone or in combination, may impact as predictive and prognostic molecular markers in OvCa. A role for the leptin/LEPR pathway in OvCa is proposed by observations from the present study.

### 398 **Identification of tp53 gene mutations in sporadic, familial breast cancer cases and Li.Fraumeni syndrome. Is codon 72 polymorphism of tp53 gene can be considered as an important mutation marker**

Poster

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Objective: What is the mutation spectrum of tp53 gene in Pakistani breast cancer patients and Li.Fraumeni syndrome. It is the first study of its type from Pakistan.

Materials and Methods: 100 sporadic breast cancer patients, 3 families of breast cancer background and one Li.Fraumeni syndrome family was taken as subject. Out of sporadic cancer patients, from 50 patients only blood was taken as a sample and from remaining 50 patients, three type of specimens i.e. blood, normal tissue and tumor tissue has been collected from each patient. DNA was isolated from each specimen.

We analyzed 5-8 coding exons of the tp53 gene by Temporal Temperature Gradient Gel Electrophoresis (TTGE) and direct sequencing of Polymerase Chain Reaction (PCR) product. DNA from blood of members of 3 families and a Li.Fraumeni syndrome family was analyzed for genetic variations in codon 72 in exon 4 of tp53 gene using Restriction Fragment Length Polymorphism

Results: Out of these 100 sporadic cancer patients, one patient's tumor tissue has showed mutation (Pro278Ser) in exon 8. This mutated person's normal tissue and blood showed no mutation and confirmed the importance of taking three type of specimens from each patient for comparison. Out of 3 families of breast cancer background, tp53 gene mutation was not detected. In case of Li.Fraumeni syndrome (LFS), one member of family no. 1(Li.F1), with a strong history of LFS in two generations, shows mutation in exon 8 of tp53 gene. In case of Li.F1 sample we identified 3 mutations in same exon (exon 8). The three mutations include (Asn268His),(Glu286Asp) and (deletion292).

Codon 72 variation Pro/Pro and Arg/Pro was about 50% each. There are codon 72 variations in Li.Fraumeni syndrome family (Li.F1) which is already proved positive for p53 gene mutations.

Conclusions: tp53 mutations shows more dominant results in case sporadic breast cancer and Li.Fraumeni syndrome. Total number of patients for mutation detection is also an important factor and we are enhancing our data. Codon 72 variation of tp53 gene is proved as an important mutation marker. Relationship of Li. Fraumeni syndrome to tp53 gene mutations could be analyzed in scenario of codon 72 polymorphism.

Significance of work: Our study emphasizes the importance of mutational analyses of the tp53 gene, particularly in young patients with malignancies.

### 399 **Serum EGFR and serum HER2 in patients with triple negative breast cancer**

Poster

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PURPOSE: Triple negative breast cancer (ER-PR-HER2 negative) is not very common especially in Europe. This special type of breast cancer has very poor prognosis and his therapeutic approach has become a major problem. From clinical studies this type overexpress EGFR in tissue and so maybe anti-EGFR treatments can be very useful in these patients. In our study we tried to measure serum EGFR and serum HER2 in an effort to find prognostic factors for this special subgroup.

Patients and methods: During the last five years we have operated 76 patients with triple negative breast cancer (ER-PR-C-erb-B2 negative) and

two patients had core biopsy and preoperative chemotherapy. The mean age of the patients was 59,41±10.5. The tumor size was <2 cm in 30 patients, >2 cm and <5 cm in 19 patients, >5cm in 27 patients. 17 patients had multifocal breast cancer. 29 patients were node negative, 14 had <3 positive lymph node and 33 had >3 positive lymph node. The histological type was invasive ductal carcinoma in 67 patients, 5 medullary carcinoma, 3 mucinous, 2 invasive lobular carcinoma and 1 patient had DCIS. All the patients had chemotherapy and radiotherapy after the surgical treatment. 14 patients had distant metastases, 6 during the first year of their follow-up and 8 during the second year and 5 patients died during the first two years of their follow-up. From the 73 patients who they are alive 29 patients are in follow-up for less than one year, 10 patients for >2 years, 12 patients for >3 years and 22 patients for > 4years. The percentage of early distant metastases and death in our study is 17,5% and 6,4%. Serum EGFR and serum HER2 were measured in 73 patients who were alive with the method of ELISA.

RESULTS: From our results serum EGFR was not overexpressed in patients with triple negative breast cancer (mean value 0.071±0.021). Although it was expressed in all patients. HER2 was overexpressed in 8 patients with tripple negative breast cancer.

CONCLUSION: Although triple negative breast cancer overexpress EGFR in tissue, in serum EGFR is not overexpressed. On the other side we need more patients to estimate the fact that some patients overexpress HER2 in serum although they are HER2 negative in tissue. The study is continued with more patients and more measurements of the two factors during their follow-up.

### 400 **Increased intake of fruits and vegetables high in vitamin C and fibre is associated with decreased risk of renal cell carcinoma in the US**

Poster

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Although renal cell carcinoma (RCC) accounts for only 3% of adult malignancies in the USA its incidence has been increasing in the U.S. for the last thirty years, from 12 to 18 per 100,000 among white men and from 5 to 18 per 100,000 among white women. The increase cannot be fully explained by early detection of pre-symptomatic tumours. The reported ongoing epidemic of obesity in the USA and/or the increase in hypertension and diabetes may explain part of this increase, which occurred despite a drop in smoking rates. Although obesity, hypertension, and diabetes have consistently been associated with RCC risk, few studies have tried to disentangle the effects of obesity from changed dietary intake and lack of physical activity.

A population-based case-control study of 406 cases and 2,434 controls aged 40 to 85 years was conducted in Iowa in 1986-89. For 323 cases and 1820 controls from this study, information on dietary intake and other lifestyle factors was obtained using a mailed questionnaire. Cancer risks were estimated by odds ratios (OR) and 95% confidence intervals (CI), taking into account other known risk factors, especially obesity, dietary fat, hypertension, alcohol intake, physical activity and smoking habits.

High intake of vitamin C measured either by food group; raw fruit and vegetables (OR=0.4; CI=0.3-0.7, ptrend <0.001) or by nutrient: vitamin C (OR=0.4; CI=0.2-0.6) ptrend <0.001, was associated with a lower risk of RCC, when the highest quartile of intake was compared to the bottom quartile. When the nutrient fibre was differentiated by source, fruit and vegetable fibre intake showed similar significant trends but not grain fibre. Analysis of flavonoids is underway. Similar associations were found with high intake of folate, xanthin, cryptoxanthin and lycopene but not with  $\alpha$  and  $\beta$ -carotene, lutein and vitamin E. However, when stratified by gender, RCC rates were only associated with low intakes of vitamin C, xanthin, cryptoxanthin, vitamin E and lutein in women.

As increased fruit and vegetable intake is an important public health message for other cancers and coronary heart disease prevention, these findings have implications for dietary, clinical and public health interventions.