Results: Median age of the patients included in the study was 59.9 years (range, 40-80). Mean carcinomatous and sarcomatous component were 55.2% (range, 10-95%) and 44.7% (range, 5-90%), respectively.

Primary tumor sites were ovary and endometrium in 59.9% and 47.7% of patients, respectively. There were 5.8% of patients in stage IIB, 11.7% in stage IIIB, 47.1% in stage IIIC and 23.5% in stage IV. 94.1% of patients had metastatic disease. The most common metastatic sites were omentum, ovaries, colon, appendix and tuba. There were also two patients with liver metastasis. 10 out of 17 patients (58.8%) were treated with a combination chemotherapy regimen of cisplatin-ifosfamide (PI) and seven patients (40.2%) were treated with paclitaxel-carboplatin (PC) protocol. One patient whose tumor contains 80% carcinomas and 20% sarcomas had a consolidation radiotherapy to the pelvic region after chemotherapy. Median number of chemotherapy cycles was 6(range: 3-9). 18.8% of patients had progressive disease despite chemotherapy. The remaining 13 patients (81.2%) responded to chemotherapy; there were 7 patients with CR and 6 patients with PR and stable disease. Response rates of patients treated with PC (100%) were remarkably higher than the response rates of patients treated with PI (80%). Patients with predominating carcinomatous component had a higher response rate(88.8%) than patients with predominating sarcomatous component(60%).

Conclusion: MMMT are highly chemoresponsive tumors, irrespective of primary site. One of the best predictors to response is the histologic pattern. Predominating histopathologic feature (carcinoma or sarcoma) should be taken into consideration in predicting the response and planning the chemotherapy regimen.

189 POSTER

Evaluation of human papilloma virus infection in cervical cancer and P53 gene mutations.

R. Salehi, M. Salehi, P. Shoaie. *Isfahan University of Medical Sciences, Genetics and Molecular Biology, Isfahan, Iran*

Cancer of uterine cervix is one of the most prevalent cancers in women, after breast cancer. Infection with high risk Human Papilloma Virus (HPV) and disfunctioning of P53 tumor suppressor gene due to molecular lesions are thought to be the main carcinogenesis factors in cervical cancer. To study the prevalence of HPV infection and status of P53 tumor suppressor gene, 50 paraffin embedded tissue samples with stage specific pathological diagnosis of cervical cancer collected from the university hospitals. DNA was extracted from tissue sections and PCR amplified using general, HPV16, and 18 type specific primers. To detect mutations in P53 gene, after PCR amplification of the desired exons the PCR products were subjected to single strand conformation polymorphism (SSCP) analysis. Thirty-seven samples were positive for HPV infection. Out of these 37 samples, 23 were positive for HPV16 and 4 samples for HPV18. Results of SSCP analysis of P53 gene demonstrated polymorphism in 4 samples, among which 3 were from HPV positive and 1 from HPV negative samples. Our results clearly demonstrate the importance of HPV infection in cervical cancer. HPV16 showed higher prevalence than HPV18 which indicates the important rol of HPV16 in cervical neoplastic transformation. Also there might be a relationship between P53 mutations and HPV infection in this cancer among the patients under study.

190 POSTER

E-cadherin and beta catenin immunoexpression in primary ovarian carcinomas: an association with clinicopathological features.

C. Faleiro Rodrigues[1], I. Macedo Pinto[1], D. Pereira[2], C. Coutinho[2], C. Lopes[1]. [1] *Portuguese Institute of Oncology, Pathology, Porto, Portugal;* [2] *Portuguese Institute of Oncology, Medical Oncology, Porto*

Backround Epithelial cadherin is an cell-cell adhesion molecule that forms a complex with alpha, beta and gamma catenin proteins. Reduced expression of E-cadherin and catenins has been associated with low histological differentiation, invasiveness and metastatic disease in human carcinomas.

Aim: Evaluate E-cadherin and beta catenin immunoexpression pattern (reduced *versus* preserved phenotype) in ovarian carcinomas and its relation with clinicopathological features

Materials and Methods Immunohistochemical analysis of E-cadherin and beta catenin in 104 carcinomas.

Results The immunoexpression pattern of E-cadherin correlated with histological subtype ($p<0.01$), peritoneal implants ($p=0.006$), and residual tumour ($p=0.04$). The preserved phenotype of E-cadherin in 37/104 carcinomas associated with mucinous carcinomas, absence of peritoneal implants and residual tumour. Whereas, the reduced phenotype of E-cadherin in 67/104 carcinomas associated with advanced stage tumours, serous carcinomas, presence of peritoneal implants and residual tumour >2cm after cytoreductive surgery.

The immunoexpression pattern of beta catenin correlated with histological subtype ($p<0.01$), tumour differentiation ($p=0.02$), and peritoneal implants ($p=0.04$). The preserved phenotype of beta catenin in 27/104 carcinomas associated with well/moderately differentiated tumours, serous, mucinous and endometrioid histological subtypes, absence of peritoneal implants and residual tumour. Whereas, the reduced phenotype of beta catenin in 77/104 carcinomas associated with advanced stage tumours, poorly differentiated serous and clear cell carcinomas, presence of peritoneal implants and residual tumour.

The immunoexpression pattern of E-cadherin correlated with that of beta catenin ($p<0.001$). The simultaneous immunoexpression patterns of E-cadherin and beta catenin significantly associated with peritoneal implants ($p<0.001$), and histological subtypes ($p=0.001$).

Conclusion The immunohistochemical profile of E-cadherin and beta catenin was shown to be of biological relevance and may provide new insight into the biology of ovarian carcinogenesis. Since, the reduced phenotype of these molecules was shown to associate with aggressive biological behaviour, increased invasiveness and peritoneal implants.

Other gastro-intestinal tumours

191 POSTER

Phase II trial of gemcitabine and capecitabine (GemCap) in patients with advanced biliary cancer.

J.J. Knox, D. Hedley, A. Oza, L. Siu, R. Feld, E. Chen, M. Nematollahi, G. Pond, M. Moore. *Princess Margaret Hospital / University Health Network, University of Toronto, Medical Oncology and Hematology, Toronto, Canada*

Background: Advanced biliary cancer is an aggressive cancer with a median survival time of under 6 months. Chemotherapy has shown minimal activity with little impact on overall survival. Recent phase II trials suggest that newer agents such as gemcitabine or capecitabine have activity (19-35% RR) in this disease. Preclinical data suggests synergy between gemcitabine and capecitabine. We conducted a phase II trial to study the efficacy and toxicity of both drugs in combination in patients with advanced or metastatic biliary cancer.

Methods: Patients with unresectable cholangiocarcinoma or gallbladder cancer were enrolled from July 2001 onward. Eligible patients had histologically or cytologically confirmed adenocarcinoma, no prior systemic therapy, ECOG PS $\leq$ 2, serum total bilirubin up to 3 x normal and measurable disease. Treatment consisted of gemcitabine 1000 mg/m ^{2} IV day 1, 8 concurrent with capecitabine 650 mg/m ^{2} PO BID day 1 to 14, on a 3 week cycle (Hermann et al, Proc. ASCO, 2000). Tumor response was assessed by RECIST criteria.

Results: Of the 25 patients enrolled to date 12 (48%) had cholangiocarcinoma and 13 (52%) had gallbladder cancer. Median age was 62 (range 45-81). A total of 128 cycles of chemotherapy was administered, for an average of 5.4 cycles per patient (range 1-15). At median follow-up of 4.2 months, 25 patients are evaluable for toxicity and 21 for response. There are 6 partial responses (29%), plus an additional 9 patients with stable disease > 3 cycles (43%). Median time to disease progression is 6.3 months. Overall survival is 9.6 months. No grade 4 toxicity was seen (see table below). Grade 3 neutropenia (no febrile neutropenia) and manageable hand-foot syndrome were most common.

Common Toxicity	Percentage of patients (worse toxicity, n = 25)	
	NCI grade 2	NCI grade 3
Neutropenia	4	20
Thrombocytopenia	0	12
Hand-Foot syndrome	12	16
Fatigue	16	4
GI	12	0

Conclusions: GemCap is an active and extremely well tolerated chemotherapy regimen in patients with advanced biliary cancer. GemCap has an objective response rate comparable to or better than most other phase II data, but also demonstrates durable disease stabilization, encouraging median survival and mild toxicity. Anticipating that this regimen will have