prognostic factor and to analyze further possible genetic associations between HLA-A2 and ovarian cancer.

923 POSTER

Positron Emission Tomography (PET) with 2-[18F]-Deoxyglucose for detecting recurrence of epithelial ovarian cancer

A. Serrano[1], R. Gerson[2], J. Altamirano[3], D. Gallardo[4], G. Estrada[5], A. González[6], D. Muñoz[6], J. Robles[6], J. De la Garza[1], A. Dueñas-González[1]. *[1]Instituto Nacional de Cancerología, Clinical Research, Mexico City, Mexico; [2]ABC Medical Center, Medical Oncologist Department, Mexico City, Mexico; [3]Instituto Nacional de Cancerologia, Nuclar Medicine Department, Mexico City, Mexico; [4]Instituto Nacional de Cnacerologia, Internal Medicine Department, Mexico City, Mexico; [5]National Autonomic University of Mexico, PET/Ciclotron Unit, Mexico City, Mexico; [6]Instituto Nacional de Cancerologia, Gynecologic Surgery Derpartment, Mexico City, Mexico*

Background: EOC is a common gynaecological neoplasm. Recurrence is seen in up to 70% of cases. PET is a novel type of imaging study that works on the principle of detecting increased glucose uptake in neoplastic tissues.
Methods: PET scans were performed in patients pre-treated for EOC, whom during surveillance showed increasing CA-125 serum levels, or suspicious lesions detected by CT scan. Sensitivity, specificity and positive or negative predictive values were calculated for PET, CT scan and CA-125 antigen.
Results: From February 2002 to December 2004, 21 patients were included, mean age 56.2 years. Seventeen had increased CA-125 antigen (80.9%), suspicious lesions on CT scan (57.1%), both (42.8%) and positive PET in 18/21 patients (85.7%). Liver, lungs and lymph nodes were more commonly detected as positive anatomic sites. Average number anatomic sites 2.0±0.9. Mean size lesion 2.6±1.8 cm, mean SUV-max: 5.4±2.4. Quantitative analysis for PET, CAT scan and CA-125 antigen demonstrated sensitivity 100%, 62%, 88%; specificity 60%, 60%, 50%; positive predictive value 88%, 83%, 88%; and negative predictive value 100%, 33%, 50%, respectively.
Conclusions: PET has elevated capability for detecting recurrence of EOC; the utility is limited for tumor size. Peritoneal carcinomatosis is detected in low frequency through PET, but this metabolic study identifies several anatomic sites with more frequency than other studies. It is necessary to create a consensus about clinical indications for PET scan in ovarian cancer.

924 POSTER

Radiotherapy vs. radiotherapy+chemotherapy of advanced cervical cancer: regression of tumour, early and late sequelaes, relapses of disease and 3-years survival (the third phase)

S. Cikaric, S. Petrovic-Stupar, I. Marjanov, L. Rudan, S. Colakovic, A. Tomasevic, B. Rakovic. *Institute for Oncology and Radiology of Serbia, Radiotherapy, Belgrade, Serbia*

Background: A prospective randomised study of 184 patients with advanced cervical cancer (st. IIb – IVa) treated with either radio-therapy alone (RT group), or radiotherapy+chemotherapy (RT+CH group) was started at the beginning of May, 2002 and the last patient of this series was treated in March 2003. (Project N° 1683 of Ministry of Science, Technology and Development of Rep. Serbia-II Phase of study). The aim of this study is to show comparison of treatment results of advanced cervical cancer using either RT or RT+CT.
Material and methods: Clinical material of 184 cervical cancers was randomised in two groups: RT – 94 (51.1%) pts and RT+CT – 90 (48.9%) pts. Distribution of patients by stages (FIGO), hystopatological type (and gradus) and age was very similar in both groups. Treatment regimes were:
RT group: – EBT – 46 Gy/22 fractions, 2 parallel opposite fields without central Pb shields+HDR brachytherapy – 5×7 Gy/.A (Ut. tube+2 vag. ovoids)
RT+CT group: RT as first group+CT using cisplatin (5 cycles during radiotherapy, once a week).
Results: Partial regression of cervical tumour immediately after the end of the treatment was 86% of pts. for RT group vs. 83% of the pts in RT+CT group. Early complications (diarrhoea, dysuria, abdominal pains, nausea, vomitus, leucopenia, trombocitopenia, anemia, febricity) were noted in 37.5% pts of RT group vs. in 58.3% of the pts of RT+CT group (I Phase of study). Corrected actuarial 3-years survival (RT vs. RT+CT): st. IIb – 78% vs. 84%; st. IIIb – 55% vs. 60%; total – 68% vs. 76%. Late sequelaes were noted as follows (French –Italian glossary): RT group vs. RT+CT group: G1 – 23% vs. 20%; G2 – 29% vs. 30%; G3+4 – 14% vs. 22%, all of late seq. – 66% vs. 72%. Relapses were: (RT vs. RT+CT): local (regional) 5% vs. 3%, metastatic 12% vs. 13%, local and metastatic 4% vs. 6%, total 21% vs. 22%.
Conclusion: There was no benefit of RT+CT vs. RT alone in treatment of locally advanced cervical cancer. We shall follow-up treatment outcome and compare results of these two groups of treated patients next 5 years.

925 POSTER

Impact of epidermal growth factor receptor (EGFR) expression in disease free survival and rate of pelvic recurrences in advanced cervix cancer patients treated with chemoradiotherapy

J. Pérez-Regadera[1], A. Sánchez-Muñoz[2], J. De la Cruz[3], C. Ballestin[4], R. García Martín[4], P. Sanchez-Rovira[2], D. Lora[3], E. Lanzos[1]. *[1]H. Doce de Octubre, Servicio de Oncologia Radioterapica, Madrid, Spain; [2]H. U. de Jaen, Servicio Oncología Médica, Jaén, Spain; [3]H. Doce de Octubre, Servicio de Epidemiologia, Madrid, Spain; [4]H. Doce de Octubre, Servicio de Patología, Madrid, Spain*

Background: Concurrent chemoradiotherapy has improved the prognosis in advanced cervix cancer patients. Nevertheless at least the half of the patients die from the progression of the disease.
Objective: To analyze the prognosis significance of the EGFR expression by means of disease free survival (DFS) in patients with advanced cervix carcinoma treated with concomitant chemoradiotherapy.
Methods: 112 biopsies of patients with advanced cervical cancer (11 IB2-IIA, 25 IIB, 63 IIIB, 13 IVA) were analyzed prospectively to detect EGFR expression using an immunohistochemical method. EGFR expression was graded as 0 if <10% of tumor cells were stained; +, 10–30%; ++, 30–70%; and +++, >70%. Tumors with grades ++ and +++ were considered as EGFR positive.
Patients received pelvic radiotherapy, brachitherapy and concurrent chemotherapy based in two protocols: (i) 47 women: Tegafur (800 mg/day per os) until three months after the end of radiotherapy; (ii) 63 women: 6 cycles of weekly cisplatin 40 mg/m^2 (46 of them also received Tegafur, same schedule). Only 2 patients not received chemotherapy.
Results: 32 (28.6%) biopsies were EGFR negative and 80 (71.4%) EGFR positive. The mean time follow-up to the relapse was 12 months (median: 9.5 months, r 2–40), and for patients without failure was 48 months (median: 40 months, r 5–121). EGFR expression did not correlate with clinicopathological characteristics as age, EGOG, histology, tumor size, FIGO stage and lymph node involvement by CT. EGFR positive tumors were associated significantly with a higher rate of pelvic recurrences (Chi-Square p = 0.006). On multivariate analysis, EGFR positive tumors had a significant decrease in DFS (p = 0.03, HR 2.25, CI: 1.05–4.81). Cisplatin therapy increased DFS of all our patients (p = 0.03, HR 0.49 CI: 0.25–0.95), but only was significantly in patients with EGFR negative tumors (p = 0.05).
Conclusion: EGFR expression was correlated significantly with a decrease in DFS and an higher rate of pelvic recurrences. The poor prognosis of these tumors EGFR positive could result in an increase of the radioresistance and a reduced sensitivity to cisplatin.

926 POSTER

Phase II Austrian AGO study of pegylated liposomal doxorubicin and gemcitabine in platinum-refractory and resistant ovarian cancer following previous platinum-taxane therapy

E. Petru[1], L. Angleitner-Boubenizek[2], A. Reinthaller[3], A.G. Zeimet[4], A. Stempfl[5], B. Volgger[6], M. Deibl[7], U. Denison[8], G. Bogner[9], C. Marth[4]. *[1]Medical University, OB/GYN, Graz, Austria; [2]Barmherzige Schwestern, GYN, Linz, Austria; [3]Medical University, OB/GYN, Vienna, Austria; [4]Medical University, OB/GYN, Innsbruck, Austria; [5]Medical University, OB/GYN, Salzburg, Austria; [6]Medical University, AGO-Studienzentrale, Innsbruck, Austria; [7]University, Institute of Biostatistics, Innsbruck, Austria; [8]Hospital Lainz, OB/GYN, Vienna, Austria; [9]Hospital Wels, OB/GYN, Wels, Austria*

Platinum-resistance is a significant problem in ovarian cancer. The Austrian AGO conducted a phase II trial combining PEG-liposomal doxorubicin (PEG-L-DXR) and gemcitabine (GEM).
Material and methods: Between 2002 and 2004, 31 patients (median age 59 years) have been included in a AGO phase II study: PEG-L-DXR 30 mg/m^2 on day 1 and GEM 650 mg/m^2 on days 1+8 every 4 weeks×6 cycles. 30 patients are evaluable for analysis. All patients had previously received platinum and a taxane and had platinum-resistant or refractory disease.
Results: Six patients achieved a complete (20%) and 4 a partial remission (33% overall response rate). 13% additional patients had stable disease. The mean and median progression-free survival was 9.6 and 3.8 months, respectively. The median overall survival was 15.8 months. Toxicity was

moderate. Grade 1 to 3 stomatitis occurred in 26%, 23% and 10%, respectively. Grade 1 to 4 palmoplantar erythrodysesthesia was recorded in 23%, 13% 3% and 3%, respectively. Grade 3 or 4 neutropenia occurred in 23% and 3% of patients while anemia and thrombocytopenia were rare (grade 3 in 3% and 10%, respectively). No patient stopped therapy due to toxicity. Quality of life (QoL) evaluations (EORTC QLQ-C30) revealed a median stabilization of physical functioning over the treatment period of 6 months in 86% of patients. Symptom QoL scores regarding fatigue were reduced over time reflecting disease progression.
The combination of L-DXR and GEM is an effective and well tolerated option in platinum-resistant and refractory ovarian cancer.

927 POSTER

Capecitabine (X) chemoradiation as first-line treatment in patients (pts) with stage IIB-IIIB squamous cervical carcinoma: a Mexican radio-oncology study group trial

P. Padilla[1], L. Torrecillas[2], R. Ayala[1], R. Martell[2], A. Hernandez[3], I. Moyaho[4], J. Soberanes[5], J. Peralta[6], B. Ortega[2], J. Talavera[7]. [1]*IMSS Siglo XXI, Oncologia, Mexico City, Mexico;* [2]*ISSSTE 20 de Noviembre, Oncology, Mexico City, Mexico;* [3]*IMSS, Oncology, Guadalajara, Mexico;* [4]*IMSS, Oncology, Puebla, Mexico;* [5]*IMSS, Oncology, Obregón, Mexico;* [6]*SSA, Oncology, Chihuahua, Mexico;* [7]*IMSS Siglo XXI, Investigation, Mexico City, Mexico*

Background: Chemoradiation with cisplatin is a standard first-line treatment for locally advanced cervical cancer. Thymidine phosphorylase, the key enzyme responsible for intratumoral conversion of X, is highly concentrated in cervical cancer tissue and upregulated by radiotherapy. As an oral therapy, X simplifies chemoradiation by avoiding problems associated with cisplatin, such as the need for hospitalisation, i.v. infusion, gastrointestinal and bone marrow toxicities. A phase I trial defined the MTD for X chemoradiation for use in this phase II trial. The main objective was safety and secondary objectives were efficacy and quality of life.
Materials and methods: Pts received X 825 mg/m^2 orally twice daily (Monday to Friday) during 5 weeks of external radiotherapy, with weekend interruption of treatment. External 4-field radiotherapy (45–50 Gy) was delivered in a 1.8 Gy daily dose 5 days/week followed by brachytherapy 30 Gy 2 weeks after external therapy.
Results: Baseline characteristics of the 114 chemo-naïve pts were: median age 50.3 years; ECOG performance status 0/1/2 (56%/38%/6%); median tumour dimension 16 cm^2(range 2.5–100 cm^2); stage II/III (62%/38%). Adverse events are shown in table 1.

Table 1

% of pts	All grades	Grade 3/4
Hand–foot syndrome	9	1
Stomatitis	15	0
Diarrhoea	58	2
Vomiting	26	0
Proctitis	28	0
Cystitis	26	0
Radiodermatitis	35	2
Infection	18	1
Anaemia	53	1
Platelets	9	0
Neutropenia	52	0
ALT	16	0
AST	19	0

Global health status improved by 25% vs. the baseline score. An impairment in physical function of 3% was detected after external RT end and was 7% at the end of brachytherapy, but recovered to 100% after 4 weeks. Emotional function improved progressively by 11% after chemoradiation, 17% after brachytherapy and 22% 8 weeks after completing treatment ($p = 0.011$). Cognitive and social function remained constant. Fatigue and nausea/vomiting increased by 50% and 16% respectively during the first 2 weeks but returned to baseline levels at the end of chemoradiation. Pain perception increased at the end of brachytherapy but improved by 50% vs. baseline level 8 weeks after completing treatment. Loss of appetite and diarrhoea were evident at weeks 2 and 4 of treatment, but disappeared before brachytherapy. 44 pts have so far completed therapy: CR 91%, PR 9%. One pt progressed during chemoradiation. Median follow-up for this group is 7.5 months (1.5–20 months) and only 3 pts had tumour recurrence (at 2.5, 6 and 7 months). Median time to recurrence has not yet been reached.
Conclusions: X chemoradiation is well tolerated, improves most QoL domains and appears to be highly effective in patients with stage II/III cervical cancer.

928 POSTER

A multi-center phase II study of gemcitabine and oxaliplatin in platinum-refractory and platinum-resistant ovarian cancer: An Australian and New Zealand Gynaecological Oncology Group Study

P. Harnett[1], A. Goldrick[2], M. Buck[3], S. Allan[4], P. Beale[5]. [1]*Westmead Hospital, Westmead, NSW, Australia;* [2]*Liverpool Hospital, Liverpool, NSW, Australia;* [3]*Sir Charles Gairdner Hospital, Nedlands, WA, Australia;* [4]*Palmerston North Hospital, Palmerston North, New Zealand;* [5]*Royal Prince Alfred Hospital, Camperdown, NSW, Australia*

Background: Treatment options for patients with recurrent ovarian cancer are limited and never curative. Gemcitabine and oxaliplatin have shown single agent activity in relapsed ovarian cancer patients, and also synergistic interaction in vitro. This combination was used to determine the efficacy, progression-free survival, and toxicity in patients with recurrent ovarian cancer.
Material and methods: Patients with relapsed or progressive ovarian cancer and prior primary platinum-based chemotherapy who had measurable lesions and/or elevated CA 125 levels were categorized into 2 groups: Group A platinum-resistant patients (those who relapsed within 6 months of platinum-based regimen), and Group B potentially platinum-sensitive patients (those who relapsed after 6 months of platinum-based regimen). Patients received gemcitabine 1000 mg/m^2 on days 1 and 8 and oxaliplatin 130 mg/m^2 on day 8 every 21 days for up to 8 cycles.
Results: Between April 2001 and June 2003, a total 75 patients (21 in Group A and 54 in Group B) were enrolled. The median age was 58 years (range, 37–78); 37/38 patients had stage III/IV disease. By intention to treat analysis, 14 patients achieved partial response for an overall response rate of 18.7%, with 9.5% [2/21] in Group A and 22.2% [12/54] in Group B. Thirty-one patients (41.3%) in the ITT population progressed (11 [52.4%] in Group A and 20 [37.0%] in Group B). The 8-month progression-free survival rate was 47.5%(29.5% in Group A and 53.5% in Group B). Forty eight patients (64.0%) experienced grade 3/4 myelosuppression with neutropenia seen in 61.3%, and thrombocytopenia in 10.7% patients. Seventeen (22.7%) patients required transfusion with 15 receiving packed red blood cells and 2 patients requiring platelet transfusion. Non-hematological grade 3/4 toxicities were nausea (16.0%) and vomiting (24.0%).
Conclusions: Single agent chemotherapy with carboplatin, paclitaxel, or liposomal doxorubicin, each produce response rates comparable to those seen in this study, but with considerably less toxicity. Recent studies also suggest a survival advantage for treatment with combinations such as carboplatin and paclitaxel in platinum-sensitive ovarian cancer patients, but again with less toxicity. The relatively high toxicity and suboptimal response rates seen in this study suggest that the combination of gemcitabine and oxaliplatin as employed in this study is unlikely to become a mainstream therapy for relapsed ovarian cancer.

929 POSTER

Pre-operative selection criteria for operability in recurrent ovarian cancer. A study of the AGO Organkommission Ovar and the AGO Ovarian Cancer Study Group (AGO-OVAR)

M. Gropp[1], P. Harter[2], U. Canzler[3], B. Richter[4], C. Jackisch[5], A. Hasenburg[6], A. Burges[7], S. Loibl[8], M. Hahmann[9], A. du Bois[10]. [1]*Ev. Krankenhaus Duesseldorf, Frauenklinik, Duesseldorf, Germany;* [2]*HSK Wiesbaden, Gyn & Gyn Oncol., Wiesbaden, Germany;* [3]*Uniklinikum, Frauenklinik, Dresden, Germany;* [4]*Elblandkliniken, Frauenklinik, Radebeul, Germany;* [5]*Uniklinikum, Gyn & Gyn Oncol., Marburg, Germany;* [7]*LMU Großhadern, Frauenklinik, München, Germany;* [8]*Uniklinikum, Frauenklinik, Frankfurt am Main, Germany;* [9]*Universität Marburg, KKS, Marburg, Germany;* [10]*HSK Wiesbaden, Gyn & Gyn Oncol., Wiesbaden, Germany*

Background: The role of cytoreductive surgery (CS) in recurrent ovarian cancer (ROC) has not yet been clearly defined. Patient selection for OP remains arbitrarily and does not depend on established selection criteria but on center's preference.
Methods: The AGO performed a retrospective study evaluating criteria for CS in ROC. 25 institutions documented their pts with CS of invasive epithelial ROC performed 2000–2003.
Results: 267 pts were included, mean age was 59.5 years (23–83), interval from initial diagnosis was 35 months (3–174) with 108 pts (40.4%) with a treatment-free-interval of 12 months or less. 146 pts (55%) received platinum-based chemotherapy after surgery. Complete tumor resection was achieved in 133 pts (50%). Complete resection was associated with