

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

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POSTER

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

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**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, CT 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.

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

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**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), histopathological 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, vomiting, leucopenia, thrombocytopenia, 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 sequelae 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.

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# **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**

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**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, brachytherapy 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<sup>2</sup> (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, EOG, 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.

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

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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<sup>2</sup> on day 1 and GEM 650 mg/m<sup>2</sup> 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