

Five-year disease specific survival (DSS) rates were as follows: All pts (N=110) 47%, mixed type pathology 78%, pure UPSC 39% ($p<0.0064$), stage 1&2 72%, stage 3&4 13% ($p<10^{-6}$), pts receiving adjuvant CT 48%, no CT 46% ($p=0.82$), pts receiving RT 50%, no RT 43% ($p=0.23$).

5 yr disease free survival rates were as follows: all pts 42%, mixed type 66%, pure UPSC 36% ($p=0.015$), stage 1&2 60%, stage 3&4 15% ($p<10^{-5}$), pts receiving CT 35%, no CT 47% (NS), pts receiving RT 53%, no RT 28% ($p=0.016$). In a Cox regression analysis for DSS including pathology, stage, adjuvant CT and RT: stage [HR 3.9 (CI 2.1–7.2) $p=0.0001$] and pathology subtype [HR 2.4 (CI 1.02–5.9) $p=0.046$] highly significant. Adjuvant CT not significant. RT was marginally significant [HR 0.6 (CI 0.3–1.02) $p=0.059$]. RT reduced pelvic recurrence rate ($p=0.078$).

Conclusions:

1. Stage of disease and pathology subtype are significant prognostic factors.
2. Results do not support any benefit from adjuvant chemotherapy.
3. For radiotherapy a trend of improvement in local control and disease free survival was observed.

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POSTER

A randomized phase III trial of pelvic radiotherapy versus cisplatin-based combined chemotherapy in patients with intermediate risk endometrial carcinoma: a Japan Gynecologic Oncology Group study

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Background: Optimal adjuvant therapy for intermediate risk endometrial cancer patients is poorly defined.

Materials and Methods: A Japan Gynecologic Oncology Group conducted a multi-center randomized Phase III trial of pelvic radiotherapy (PRT) vs. cyclophosphamide-doxorubicin-CDDP (CAP) chemotherapy in women with intermediate risk endometrial carcinoma. As eligibility criteria, after initial surgical staging including TAH&BSO with pelvic and/or paraaortic lymphadenectomy, no residual tumor was required. Pathological examination showed $>1/2$ myometrial invasion, adenocarcinoma with any grade, but without central pathology review. PRT arm employed 50 Gray (Gy) in 20–25 fractions. CAP arm consisted of cyclophosphamide (333 mg/m²), doxorubicin (40 mg/m²) and cisplatin (50 mg/m²) every 4 weeks for 3 or more courses. Study endpoints were progression-free survival (PFS), overall survival (OS), and incidence and types of toxicity.

Results: 475 pts were entered from 1/1994 to 12/2000, but 41 were ineligible due to $\leq 1/2$ myometrial invasion, histology of sarcoma, rapid progression after entry. Because of the different biological behavior of non-endometrioid histology, 49 patients were excluded. Of the 385 evaluable endometrioid adenocarcinoma, 193 were to receive PRT arm and 192, CAP arm. Patient characteristics were mostly well balanced including median age, co-morbidity, and type of hysterectomy. Postsurgical stages were roughly 60% of Ic, 25% of II and IIIa and 10% of IIIC. Tumor grades were G1 55%, G2 30%, and G3 15%. Pelvic lymphnode metastases were 10.9% in PRT arm and 11.5% in CAP arm. Both treatment arms were completed up to 95%. Median total dose was 50 Gy in PRT and 1,309 (c)/120(a)/180(p) mg/m² in CAP arm with median 3 courses. Adverse effects were not significantly increased in the CAP arm (4.7%), compared to PRT arm (1.6%) ($p=0.077$). Median follow-up was 60.8 months (range 2.2–60.8). Response and Survival: There were no statistically significant differences in PFS and OS between the 2 regimens for all 374 pts. The PFS of PRT and CAP arms was 84.0% and 82.1%, and the OS of PRT and CAP arms was 85.9% and 87.1%, respectively. In a subgroup analysis, among 184 pts with low intermediate risk as stage pT1c (except >70 yo., or G3), the PFS of PRT and CAP arms was 94.3% and 88.6%, and the OS of PRT and CAP arms was 95.0% and 91.7%, respectively. Among 119 pts with high intermediate risk as stage Ic (>70 yo., or G3), II and IIIa (positive cytology), CAP arm significantly improved PFS ($p=0.03$) and OS ($p=0.01$) when compared with PRT. Recurrence rate in each PRT and CAP arm was 15.1%, 16.5%, respectively, with 30% pelvic and 70% extrapelvic recurrent sites.

Conclusions: Adjuvant cisplatin-based combined chemotherapy might have potential as an alternative to radiotherapy for intermediate risk endometrial cancer, such as stage Ic, II, or IIIa (positive cytology).

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POSTER

Cytoreductive surgery plus intraperitoneal hyperthermic perfusion in the treatment of recurrent epithelial ovarian cancer

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Background: The optimal salvage therapy for recurrent ovarian carcinoma has not been clearly established. We investigated the effect of an aggressive approach consisting of cytoreductive surgery plus hyperthermic intraperitoneal drug delivery followed by adjuvant systemic chemotherapy.

Patients and methods: 34 patients with recurrent ovarian carcinoma were treated by cytoreductive surgery plus intraperitoneal hyperthermic perfusion. Median patient age was 53 years (range, 30–67) and mean follow-up was 17.4 months (range, 0.3–36.0). All patients had been pretreated by surgery and cisplatin/Taxol-based regimens. The intraperitoneal hyperthermic perfusion was performed with the open Coliseum technique, using a preheated polysaline perfusate containing mitomycin (20 mg/m²) plus Mitoxantron (20 mg/m²) through a heart-lung pump (mean flow of 1500 mL/min) for 60 min in the hyperthermic phase (42°C). At the first 3 post-operative days 5-Fluorouracil 500 mg/m² was applied intraperitoneally with a dwell time of 23 hours. 3 cycles of adjuvant systemic chemotherapy were given using Topotecan 1.0 mg/m² d1–4 and Gemcitabine 1000 mg/m² d1, 8 with a treatment free interval of 14 days.

Results: 37 procedure have been performed in 34 pts. Two-year overall survival was 68% with 80% for pts. with complete cytoreduction (CC0 /1). Median time to progression was 14.5 months. Treatment-related morbidity, 30 days – mortality and acute toxicity (grade III+IV) rates were 10.8%, 0% and 6%, respectively.

Conclusion: Complete cytoreduction plus hyperthermic peritoneal perfusion plus adjuvant chemotherapy seems to be an effective treatment for recurrent ovarian carcinoma. Morbidity and mortality rates are in line with other major oncologic operations.

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POSTER

Human leukocyte antigen (HLA) A2 as a negative prognostic factor in ovarian cancer patients

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Background: We have shown recently that HLA-A2 frequency and ovarian cancer mortality rates are higher in Scandinavia than in the rest of Europe. Furthermore we could define a selected group of ovarian cancer with high frequency of HLA-A2 phenotype, related to clinical parameters.

Material and methods: A total of 125 patients with epithelial ovarian cancer were recorded by age, histology, stage and treatment. Group 1 included 28 cases of advanced ovarian cancer, which were analyzed for HLA-A, -B, -C and -DRB1 expression by PCR/sequence-specific oligonucleotide hybridization procedure (PCR/SSOP). HLA frequencies from healthy Swedish and other European countries bone marrow donors (Bone Marrow Donors Worldwide, Leiden, The Netherlands) were used as comparison. Group 2 (n=97) represented patients consecutively admitted at our department during 1995. So far, HLA-A2 PCR/SSOP typing was performed on DNA extracted from paraffin-embedded tissue specimens in 35 patients.

Results: Group 1: The HLA-A2 genotype was found in 46% of the patients (healthy Swedish population-35%); among patients with serous adenocarcinomas the frequency was even higher. A3 allele was poorly represented (12% vs. 17%). Seven patients were homozygotes for A2 allele (25%), which is two times the healthy Swedish population (12%), and three times the median frequency in Europe (8%). We also observed an increase in several A2, B and DRB1 haplotypes. Median overall survival among HLA-A2 positive patients was 2.6 years (min 1.5 – max 6.2) versus 3.1 in non-A2 patients (min 1.3 – max 8.7).

Group 2: So far, 35 patients have been tested, and 21 were found positive for HLA-A2 phenotype (60%). Serous adenocarcinomas were found in an excess of A2 positive (67%) vs. 43% of A2 negative patients. After five years, 70% stage I-II and 20% stage III-IV patients were alive. None of the A2 positive patients was alive compared to 50% of the A2 negatives.

Conclusions: Presence of the HLA-A2 allele seems to be correlated with poor prognosis in ovarian cancer patients. HLA-A2 homozygotes and some HLA-A2-B and -DRB1 haplotypes are higher expressed than in healthy individuals. Ongoing investigations are launched to study HLA-A2 as a