

EP-1320

Postoperative radiotherapy results of serous endometrial carcinoma: 34 cases during 2003-2014

K. Holub¹, A. Rovirosa², G. Oses¹, L. Castilla¹, J. Mansilla³, R. Llorente¹, K. Cortes¹, J. Garcia¹, S. Garrido¹, A. Huguet¹, C. Castro¹, J. Sola¹, J. Ordi⁴, J. Pahisa⁵, A. Biete¹

¹Hospital Clínic i Universitari, Radiation Oncology Dpt, Barcelona, Spain

²Hospital Clínic i Provincial, Radiation Oncology Dpt, Barcelona, Spain

³Hospital Rebagliati, Radiation Oncology Dpt, Lima, Peru

⁴Hospital Clínic i Universitari, Pathology Dpt, Barcelona, Spain

⁵Hospital Clínic i Universitari, Gynecological cancer Unit, Barcelona, Spain

Purpose or Objective: To evaluate post-operative treatment results of serous endometrial carcinoma (SEC) comparing two histological subtypes (with and without an endometrioid component) and its impact on overall survival (OS), local control, distant relapses in patients treated from 2003-2014.

Material and Methods: Thirty-four patients (p) with SEC were treated with post-operative radiotherapy at our centre. All the patients were divided into two groups according to the histological subtype: 21p with pure SEC in Group 1, 13p with mixed SEC with endometrioid cells in Group 2. All patients were staged using 2009-FIGO classification. Group 1: 10-IA, 5-IB, 1-IIIA, 4-IIIC1, 1-IIIC2. Group 2: 2-IA, 7-IB, 2-IIIA, 1-IIIB, 1-IIIC1. Pathology. Group 1: Grade (G): G2- in 5p, G-3 in 16p. Group 2: Grade: G1 in 1p, G2- in 3p, G-3 in 9 p. Myometrial invasion was presented in 10p in Group 1 and 3p in Group 2. Median tumour size was 3.6cm in Group 1 and 3.9cm in Group 2. Vascular and lymphatic space invasion was presented in 5p (23.8%) in Group 1 and in 6p (46.2%) in Group 2. Radiotherapy: all p received high-dose-rate brachytherapy (1-3 fractions of 4-7 Gy), and 17/21p in Group 1 and 12/13p in Group 2 received external beam irradiation (mean dose of 45.2Gy in Group 1 and 44.6 Gy in Group 2, after 3D planning and 4-field technique tailored to surgical results). Chemotherapy: 4-6 cycles of carboplatin + paclitaxel in 8/21 pts in Group 1 and 6/13 pts in Group 2.

Results: Mean age: 68.7 years (57-81) in Group 1, 70.3 years (63-83) in Group 2. Mean follow-up (months): in Group 1: 57 (7.8-153), in Group 2: 63 (12-117.8). Relapses: No vaginal relapses were developed; only 3/34p (8.8%) presented loco-regional relapse (2p in Group 1 and 1p in Group 2); 8/34 p (23.5%) had distant metastasis (3/21 in Group 1 and 5/13 in Group 2) and 13/34p (38.2%) had died at the time of the last control. The mean OS (months) was 58.9 (range 22.9-138.8) in Group 1 and 37.1 (range 12-84.8) in Group 2. The mean survival time to metastasis (months) was 38.4 (range 8.2-70.7) in Group 1 and 19.6 (range 9.5-53) in Group 2. The mean survival time to loco-regional relapse (months) was 27.5 (10.9-16.6) in Group 1 (2p) and 13 in Group 2 (only 1p).

Conclusion: At the time of the last control 61.8%p were alive. The main cause of relapse was distant metastases followed by loco-regional relapse with no patient showing vaginal relapse. The mean OS was substantially longer in patients with the pure SEC subtype (58.9 vs. 37.1 months) as was the mean survival time to metastasis (38.4 vs. 19.6 months) possibly due to the higher number of IA stage patients. Comparisons of two histological subgroups are scarce in the literature.

EP-1321

Postoperative treatment results of clear-cell endometrial carcinoma: 20 cases from 2005 to 2014

G. Oses¹, K. Holub¹, A. Rovirosa², L. Castilla¹, J. Mansilla³, R. Llorente¹, K. Cortes¹, J. Ordi⁴, J. Pahisa⁵, M. Arenas⁶, S. Sabater⁷, A. Biete¹

¹Hospital Clínic i Universitari, Radiation Oncology Dpt, Barcelona, Spain

²Hospital Clínic i Universitari, Radiation Oncology Dpt, Barcelona, Spain

³Hospital Rebagliati, Radiation Oncology Dpt, Lima, Peru

⁴Hospital Clínic i Universitari, Pathology Dpt, Barcelona, Spain

⁵Hospital Clínic i Universitari, Gynecological Cancer Unit, Barcelona, Spain

⁶Hospital sant Joan de Reus- Tarragona, Radiation Oncology Dpt., Reus, Spain

⁷Hospital General de Albacete, Radiation Oncology Dpt., Albacete, Spain

Purpose or Objective: To evaluate treatment results in the post-operative treatment of Clear-cell endometrial carcinoma (CCEC) related to overall survival (OS), local control and distant relapses from 2005 to 2014

Material and Methods: Twenty patients (pts) with CCEC were treated at our centre with post-operative radiotherapy. All patients were staged after surgery using the 2009-FIGO classification: 6-IA, 4-IB, 2-II, 1-IIIA, 4-IIIC1, 2-IIIC2, 1-IVA. Pathology. Grade (G): G-1 in 2pts, G2- in 5pts, G-3 in 13pts. Myometrial invasion was observed in 40% of pts. Median tumour size was 3.6cm (range 1.2-6.5cm). Vascular and lymphatic space invasion was presented in 25% of pts. Histological subtypes: clear cell in 11 pts (55%), clear cell mixed with endometrioid in 9 pts (45%). Radiotherapy: all pts received high-dose-rate brachytherapy (1-3 fractions of 7-4 Gy) and 18/20 pts received external beam irradiation (mean dose of 45 Gy (44-46Gy) after 3D planning and 4-field technique tailored to surgical results). Chemotherapy: 4-6 cycles of carboplatin + paclitaxel in 8 pts (40%).

Results: The mean age: 67 years (51-79). Mean follow-up: 4.34 years (range 0.96-9.75 years). Relapses: No pts developed vaginal relapse; 6/20 pts (33%) presented loco-regional relapse, 4/20 (20%) pts had distant metastasis (two with pelvic relapse 2/20 (10%); all 6 pts with relapse died (33%). The mean OS of 33.6 months (range 16.3-74.4 months). The mean survival to metastasis was 38.4 months (range 8.2-70.7 months) and 20.64 months (8.2-32months) to loco-regional relapse. No patient was lost to follow-up.

Conclusion: At the time of the last control 70% of patients (14/20) were alive and without relapse. The main cause of relapse was loco-regional followed by distant metastases, with no patients showing vaginal relapse. The results of this study seem to be similar to those reported in the literature.

EP-1322

Effects of upfront radiotherapy on isolated para-aortic lymph node metastasis in cervical cancer

J.H. Kim¹, K.Y. Eom², I.A. Kim², H.G. Wu¹, H.J. Kim¹

¹Seoul National University Hospital, Department of Radiation Oncology, Seoul, Korea Republic of

²Seoul National University Bundang Hospital, Department of Radiation Oncology, Bundang, Korea Republic of

Purpose or Objective: To evaluate the clinical features and treatment outcomes of isolated para-aortic lymph node (PALN) recurrence in cervical cancer patients, and analyze prognostic factors for overall survival

Material and Methods: Between 1992 and 2014, 1302 cervical cancer patients received radiotherapy at two institutions, Seoul National University Hospital and Seoul National University Bundang Hospital. Of these, 29 had isolated PALN recurrence. The median age at recurrence was 62 years (range, 34-81 years). Twenty-seven of 29 patients received salvage treatment: 16 received sequential or concurrent chemoradiotherapy, 6 radiotherapy to the para-aortic region, 4 chemotherapy alone, and 1 chemotherapy followed by salvage operation.

Results: The median follow-up duration after salvage treatment was 17.4 months (range, 1.1-139.2 months). Treatment failure after salvage treatment occurred in 10 of 27 patients. The 5-year progression-free and overall survival rates of all patients were 25.1% and 30.5%, respectively. Disease-free interval \geq 24 months and upfront radiotherapy (or chemoradiotherapy) were good prognostic factors for

overall survival in multivariate analysis. As to progression-free survival, disease-free interval, PALN size, and upfront radiotherapy (or chemoradiotherapy) were significant prognostic factors in multivariate analysis. Acute grade 3 gastrointestinal and hematologic toxicities developed in 3 patients.

Conclusion: For isolated PALN recurrence of cervical cancer, upfront radiotherapy (or chemoradiotherapy) should be considered as a salvage treatment, especially in patients with long disease-free interval.

EP-1323

Clinical audit of cervical cancer records from Kidwai Memorial Institute of Oncology, South India

S. Palled¹, U.K. Annasagara Srivinas², N. Thimmiah², V. Raghu³, T. Chitradurga Abdul Razack², N. Srinath², V. Chandraraj², S. Goyal², L. Vishwanath², G. Hosahalli Boriah², S. Poojr², G. G Venkata², J. Kunigal Puttaswamy²

¹Kidwai Memorial Institute Of Oncology, Radiation Oncology, Bangalore- Karnataka, India

²Kidwai Memorial Institute Of Oncology, Radiation Oncology, Bangalore, India

³Kidwai Memorial Institute Of Oncology, Medical Biostatistics, Bangalore, India

Purpose or Objective: To present the long term outcomes and results of the clinical audit of cervical cancer cases treated at our cancer centre in the year 2010.

Material and Methods: A clinical audit of case records of cervical cancer treated at our centre in the year 2010 was analysed. Out of the 306 patients evaluated for Cervical Cancer, case records for demographics, treatment methodology, long term toxicity and survival data was analysed using the SPSS. The variables were compared using the Chi-square test, the survival by Log-Rank test.

Results: Out of a total of 306 patients with a median age group of 50 years (range-30-80) evaluated for various symptoms pertaining to cervical cancer, 204 underwent concurrent chemoradiation and 102 patients received only radiation alone. In the total cohort, FIGO stage grouping was stage II in 36% (n=111), stage III in 56% (n=172) and stage IVA in the remaining. Radiation was delivered to a dose of 75Gy to point A, external beam radiotherapy (dose of 45-50Gy) being delivered predominantly on the Telecobalt and followed with low dose rate brachytherapy. Cisplatin based concurrent chemotherapy was delivered as weekly at a dose of 40 mg/sqm in 76% of the patients, while in the rest it was delivered as three-weekly regimen. In the weekly chemotherapy arm, 70% of them received atleast 4 cycles. Median overall treatment time (OTT) was 8.4 weeks (40-95 days). At a median follow up of 36 months, 5 year overall survival in the entire cohort was 30%. The OS in the concurrent chemo radiation arm was better (34% Vs. 29%, p=0.036). The OS in the two chemotherapy arms did not show a difference (log rank, p=0.46). The survival difference between the two stage groups demonstrated a superior outcome in patients with stage II (40% vs 32%, p=<0.05). Multivariate analysis showed stage, type of chemotherapy and overall treatment (OTT) time were significant for OS. Acute hematologic, GI, GU and skin toxicity was higher in chemoradiation arm. Difference in long term toxicity between the two treatment arms was not statistically significant.

Conclusion: Our clinical audit of cervical cancer cases treated at our cancer centre, although demonstrates slight inferior survival outcome compared to available literature, might be accounted for the lower Point A dose, longer overall treatment time, and suboptimal chemotherapy dose. These factors have been taken care in our current clinical practice.

EP-1324

High risk early stage endometrial cancer: lymphadenectomy with brachytherapy as alternative to EBRT

R.L. Fabiano¹, M. Molinaro², M. Santoro², E. Mazzei², R. Molè², A. Destito², D. Pingitore², C. Bianco³

¹Magna Graecia University, Radiotherapy, marina di strongoli, Italy

²Ciaccio Hospital, Radiotherapy, Catanzaro, Italy

³Magna Graecia University, Radiotherapy, Catanzaro, Italy

Purpose or Objective: Endometrial cancer (EC) is the most common gynecologic malignancy in developed countries, affecting 40,000 women/year. Recent studies have shown the therapeutic benefit of pelvic lymphnode dissection in order to determine the extent of disease and establish adjuvant therapies. Several trials have also shown that adjuvant radiotherapy(RT) in early stage EC reduces the risk of local recurrence without improving overall survival (OS). However the role of both lymphnode dissection and adjuvant RT in high risk early stage EC is not clearly defined. The aim of our retrospective study is to evaluate the validity of linfadenectomy with intravaginal brachiterapy (IVRT) as therapeutic option in high risk early stage EC, compare it with adjuvant external beam radiotherapy (EBRT) and determine which one determine the best results in terms of Recurrence Free Survival (RFS) and OS.

Material and Methods: Were evaluated 85 patients with EC treated between January 2007 and January 2012 with 36 months of follow-up. Of these, 47 had low risk early stage (G1 with myometrial infiltration less than 50% or G2 with myometrial infiltration less than one third) treated with bilateral hysterosalpingovariectomy without any adjuvant therapy; 38 were patients with high risk early stage (G1 with more than 50% of myometrial invasion, G2 with more than one third of myometrial infiltration and G3) treated with bilateral hysterosalpingo-oophorectomy and then submitted to pelvic lymphadenectomy (n. 22 pts) plus IVRT or EBRT (n. 16 pts) based on age, comorbidities, tumor grade, histotype, tumor size, presence of lymphovascular invasion space, depth or myometrial infiltration.

Results: The recurrence rate was respectively of 4% (n.2 pts) among the low risk patients with a RFS of 96% and of 19% (n.11 pts) among the high risk patients with a RFS of 81%. Considering the high risk group, the 45% of recurrence (n.5pts) occurred among patients treated with EBRT and the 55%(n.6pts) among those who received lymphadenectomy with IVRT. The mortality rate was respectively 0% (n.0 pts) among patients treated with EBRT and 0% (n.0 pts) among those who received lymphadenectomy with IVRT.

Conclusion: Our study shows that in high risk early stage EC there is no significant difference in terms of RFS among patients who received pelvic lymphadenectomy with IVRT and those which had been treated with EBRT. There was also no statistically significant difference for OS between the two groups.

EP-1325

Phase I/II study of weekly cisplatin plus paclitaxel and radiotherapy for primary cervical cancer

L. Zhu¹, W. Jiang¹, S. Tian¹, A. Qu¹, H. Wang¹, X. Li¹, A. Liao¹, Y. Jiang¹, J. Wang¹

¹Peking University Third Hosiptal, Radiation Oncology, Beijing, China

Purpose or Objective: To determine the maximum tolerated dose (MTD) and effectiveness of weekly PTX plus DDP concurrent with whole pelvic irradiation in Chinese women with locally advanced cervical cancer.

Material and Methods: Between November 2008 and March 2015, a total of 36 patients with primarycervical cancer cervical cancer, FIGO stage IB1 to IIB, confirmed by histology, negative para-aortic lymph nodes were enrolled into this phase I / II trial. Chemotherapy agents were