CT modified radiotherapy planning in a significant percentage of patients.

PO-0728
Stereotactic Body Radiation Therapy for oligometastatic patients with ovarian cancer
A. Tozzi1, C.S. Ittoke1, T. Comito1, C. Fransenze1, F. De Rose1, E. Villa1, P. Navarria1, A.M. Ascolese1, D. Franceschini1, R.L.E. Liardo1, E. Clerici1, G.R. D’Agostino1, V. Palumbo1, M. Scorsetti1
1Istituto Clinico Humanitas, Radiotherapy and Radiosurgery, Rozzano Milan, Italy

Purpose or Objective: Ovarian cancer is a gynecological malignancy characterized by a dismal outcome for its tendency to metastasize despite aggressive systemic therapies, commonly carboplatin and paclitaxel. Among recurrent ovarian cancer, patients with oligometastatic disease are supposed to have a better prognosis since they could benefit from local approaches besides chemotherapy, considering also the limited alternative regimens of systemic therapy. The aim of our study is to evaluate the role of stereotactic body radiotherapy (SBRT) in terms of LC and toxicity in a setting of patients with oligometastatic recurrent ovarian cancer.

Material and Methods: Between January 2011 and February 2015, 15 patients (20 lesions) with recurrent oligometastatic ovarian carcinoma of any histology underwent SBRT. Toxicity and tumor response was scored using Radiation Therapy Oncology Group/European Organization for Research and Treatment of Cancer Scale. Tumor response was evaluated by CT/ PET, according to Response Evaluation Criteria in Solid Tumors.

Results: Median age at treatment was 60 years and median follow-up was 21 months. The sites of disease were abdomino-pelvic lymphnodes (13 lesions), liver metastasis (4 lesions), lung metastasasis (2 lesions) and para-vaginal mass (1 lesion). The SBRT doses were prescribed based on dimensions of target volumes and organs at risk constraints as follow: for lymphnodal lesions the dose prescription was 36-45 Gy in 6 fractions and only one case treated with 40 Gy in 4 fr; for hepatic lesions 61.89 -75 Gy in 3 fractions, for the pulmonary lesions both cases received 48 Gy in 4 fractions meanwhile in the para vaginal recurrence dose prescription was 36 Gy in 6 fractions. None of the patients had grade 3 /4 acute or late Gu or Gi toxicity. At a median follow-up of 21 months local control was observed in 85%. Complete radiologic response, partial response and progressive disease were observed in 12 (60%), 5 (25%) and respectively 3 cases (15%).

Conclusion: SBRT is a feasible and well tolerated treatment approach in oligo-metastatic ovarian patients, offering a good local control. Certainly, additional patients and longer follow-up are necessary to confirm the impact of local treatment as SBRT in ovarian cancer therapy.

PO-0729
Hematological toxicity of Rth-Chth for cervical cancer: Rth technique and dose given to bone marrow
K. Biasa1, M. Agnieszka Stefanowicz1, M. Karolina Osowicka1, P. Katarzyna Pawłów – Pyrka1, P. Lucyna Kępka1, S. Mohanty1, U. Mahantshetty2, S. Kannan1, R. Engineer7, S. Mechanery1, R. Phuralalampam1, J. Ghosh1, S. Gupta1, S. Shrivastava2
1Advanced Centre for Treatment - Research and Education in Cancer- Mumbai, Radiation Oncology, Mumbai, India
2Tata Memorial Hospital-Tata Memorial Centre, Radiation Oncology, Mumbai, India

Purpose or Objective: Adjuvant intensity modulated radiotherapy (IMRT) for cervical cancer is associated with reduced late gastrointestinal toxicity (GI) however it’s impact on quality of life (QOL) is not known. The present matched pair analysis was performed to compare QOL between three-dimensional conformal radiation (3DCRT) and IMRT.

Material and Methods: From Jan,2011- Dec,2013 patients undergoing adjuvant or salvage radiation with 3DCRT or IMRT (with or without concurrent chemoradiation) and vaginal brachytherapy were included. Those who received systemic chemotherapy or extended field radiation were excluded. The study inclusion criteria also necessitated at least 1 year of follow up with QOL assessment, at least 2 time points. At follow up toxicity was documented using CTCAE version 3.0 and QOL was measured with EORTC QLQ-C-30 and Cx-24 module. The baseline characteristics of two cohorts were compared using chi-square test. Raw scores were converted into final scores using EORTC recommended conversion and linear mixed model was used to evaluate impact of time trends and treatment technique on QOL. A 10-point difference in QOL score and p<0.05 was considered relevant and statistically significant. All data were analyzed using SPSS, version 20.0 and Graph pad Inst.

Results: A total of 64 patients were eligible. Postoperative IMRT and 3DCRT was used in 40 and 24 patients respectively. The baseline socioeconomic, disease and treatment related characteristics were well balanced in both groups rendering cohorts eligible for a matched pair analysis. At one year there was recovery in most of the QOL domains in both cohorts with objective scores reaching baseline levels. The