Proffered Papers S273

Oral Presentations (Mon, 26 Sep, 09:00-11:05) Cancer in the Older Patient

4000 ORAL

A Retrospective Comparison of Treatment Approaches in Two Groups of Age for the Elderly With Rectal Cancer

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Background: Preoperative chemoradiotherapy is considered as the standard approach for T3-4 rectal cancer but studies have shown that elderly patients could be denied optimal treatment because of age. This study analyses the current approaches of rectal cancer treatment in elderly patients

Materials and Methods: We retrospectively studied all patients older than 65 years who received at least radiotherapy for rectal cancer from 2000 to 2008 in our institution. Final analysis included 240 patients, and we compared 2 groups management: patients aged 65 to 75 years (Group A, n=127) and older than 75 years (Group B, n=113). The sex ratio was 2 for the group A versus 1.6 for the group B (p=0.42). The distribution of Charlson comorbidity index was similar in the 2 groups with 16% of patients with a score over 2. For ECOG Performance Status (PS), 66% of patients are PS 0 compared to 40% in group B (p<0.0001). In terms of tumoral stage there was no significant difference of distribution between the 2 groups: lymph node involvement was diagnosed in half of patients, and 17% of patients had metastatic disease in both groups.

Results: Median age was 74.3 years (range 65-90.6), 70.3 years in group A and 79.8 years in group B. Overall, treatment was discussed in cancer multidisciplinary team meeting in 87% of cases, in 55% and 73% of groups A and B patients, respectively (p = 0.00085). Treatment proposals were in accordance with French recommendations in 89% of cases for group A and 72% for group B (p = 0.002). At time of treatment, schedule adaptation occurred for, respectively 46% and 66% of patients (p = 0.0027). Patients in group B received less concurrent chemotherapy than patients in group A, 35% and 30%, respectively (p = 0.54), more hypofractioned radiotherapy 41% and 54%, respectively (p = 0.064), less surgery, 92% and 80%, respectively (p = 0.014) and less adjuvant chemotherapy, 34% and 10% (p < 0.01), respectively. Finally, 82% of patients in group A and 63% in group B received a treatment in accordance with guidelines (p = 0.0013) and in the logistic regression model, for non metastatic patients, the predictive factor for conformal management was age under 75 years (HR = 0.323, 95% CI: 0.152-0.684) irrespective of performance status, comorbidity, or disease stage.

Conclusions: In this series, treatment proposals and performed treatment schedules are statistically different according age. The most elder patients appear to be receiving less conformal treatment. Prospective trials and the widespread use of comprehensive geriatric assessment (CGA) for this population could help to remove barriers to standard treatment for some and develop adaptative approaches for others.

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Standard Thoracic Radiotherapy With or Without Concurrent Daily Low-dose Carboplatin in Elderly Patients With Locally Advanced Non-small Cell Lung Cancer – a Phase III Trial of the Japan Clinical Oncology Group (JCOG0301)

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Background: The standard treatment for locally advanced non-small cell lung cancer (NSCLC) has been considered to be chemo-radiotherapy

(CRT). However, the use of this combined therapy for elderly patients (pts) is still unclear. This trial was set up to evaluate whether thoracic radiotherapy (RT) with daily low-dose carboplatin (CBDCA) would result in longer survival in elderly pts with unresectable stage III NSCLC than RT alone (JCOG0301; ClinicalTrials.gov number, NCT00132665).

Materials and Methods: We selected pts aged more than 70 years who could not receive cisplatin-based combination chemotherapy and had unresectable stage III NSCLC. Pts were treated with RT alone (arm A) involving irradiation with 60 Gy or with CRT (arm B) involving equivalent RT and concurrent CBDCA 30 mg/m² per fraction up to the first 20 fractions. The primary endpoint was overall survival (OS). The trial was designed to have an 80% power to detect a difference in median survival time (MST) from 10 months in arm A and 15 months in arm B, with a one-sided alpha level 0.05. The planned sample size was 200 pts. At the second planned interim analysis, observed/planned number of events was 129/173 and the corresponding alpha level was 0.023.

Results: We enrolled 200 pts from September 2003 to May 2010. The second-planned interim analysis was performed 10 months after the 200th pt was enrolled (March 2011). In accordance with the pre-specified stopping rule, the JCOG Data and Safety Monitoring Committee recommended discontinuation of this trial because of the difference in OS favoring arm B; therefore, the trial was closed early. Pt characteristics for arms A (n = 100) and B (n = 100) were as follows: median age, 77 (71-93) and 77 (71-89); stage IIIA/IIIB (n), 54/46 and 51/49; PS 0/1/2 (n), 41/55/4 and 41/56/3; male pts (n); 84 and 80; and histology (n) squamous cell carcinoma/ adenocarcinoma/other, 55/41/4 and 42/48/10; respectively. MST for arms A and B was 16.9 and 22.4 months; OS was significantly (HR = 0.68, 95.4% CI = 0.47- 0.98, one-sided p = 0.0179 by stratified log-rank test) in favor of arm B, with multiplicity adjustment. The median progressionfree survival time was 6.8 and 8.9 months. Objective response rate was 44.9% and 51.5%. Major grade 3/4 toxicities for arms A and B were neutropenia (0%/58.5%), febrile neutropenia (0%/2.1%), thrombocytopenia (2.0%/29.8%), infection (4.1%/14.9%), and pneumonitis (3.1%/0%). Late lung toxicity (grade 3/4) was seen in 6.4% and 6.5% of pts and adverse events resulting in death were reported in 4 and 3 pts of arms A and B, respectively.

Conclusions: This is a first trial which demonstrated that concurrent daily low-dose CBDCA and thoracic RT for elderly pts with locally advanced NSCLC provides clinically significant benefits and this combined modality could be considered to be the standard treatment for this population. This study was supported in part by the Ministry of Health, Labour and Welfare of Japan.

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Stage I Non Small Cell Lung Cancer (NSCLC) in Patients Aged >80 Years - Clinical Outcomes After Stereotactic Radiotherapy Using Real Time Tumour Tracking

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Background: The number of elderly patients (pts) with stage I NSCLC is increasing. Pts aged 80 years and older often have significant comorbidity and only selected pts are surgical candidates. Treatment is therefore often primarily aimed at avoiding side effects and preserving quality of life, while curation is of secondary concern. In recent years Stereotactic Body Radiation Therapy (SBRT) has emerged as a curative treatment alternative in patients with sage I NSCLC who are medically inoperable. However, the tolerance and outcomes of SBRT in pts aged ≥ 80 years with high comorbidity rates is less well characterized. In this work we evaluated the local tumour control rate, and treatment related toxicity after SBRT using real-time tumour tracking technique in octogenarians pts with stage I NSCLC.

Methods and Materials: 25 pts aged ≥80 years (range 80-85) with stage I lung tumour were treated with SBRT. All pts were considered medically inoperable. The median Charlson score was 3 (range 1-7). Of the 25 pts. 14 had T1 tumour, 10 T2a and 1 T1b. The median tumour diameter was 2.8 cm (range 1.2-5.5). All pts were treated using a CyberKinife System with Synchrony[®] Respiratory Tracking System (SRTS) device. Five pts were treated with a single fraction (f) of 26 Gy and 16 with 3 f of 17 Gy. A risk adaptive schedule of 32-48 Gy in 3-4 f was used for central tumours (4 pts). The dose was prescribed to the isodose line of 80%. Median FU was 15 months (range 3-49).

Results: Of the 25 pts 5 showed evidence of local recurrence. One local recurrence occurred in pts treated with biologically effective dose (BED) >100 Gy10 and 4 in pts treated with BED ≤100 Gy10. The actuarial local progression free probability (LPFP) at 2 years was 63.6%. The LPFS at 2 years for pts treated with BED ≤100 Gy10 vs >100 Gy10 was 42.8% so 90.9% respectively. Overall and cancer specific survival at 2 years were 66.5% and 75% respectively. Treatment was well tolerated. Early