

Stage 2: Modified expert Delphi Consensus results are pending. **Conclusion**

Development of the first international dedicated geriatric radiation oncology curriculum is underway. This educational framework will support radiation oncology training bodies around the world in ensuring future radiation and clinical oncologists are able to provide high quality and appropriate care to the rapidly increasing numbers of elderly people with cancer.

#### EP-1647 Neoadjuvant chemoradiotherapy in elderly rectal cancer patients in a mono-institutional experience

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#### Purpose or Objective

Colorectal cancer affects similarly both young and elderly patients. The improving mean life expectancy increases the number of rectal cancer patients in good performance status (PS), permitting to achieve a curative intent. Furthermore, modern radiotherapy (RT) allows a better coverage to the tumor, preserving the adjacent organs at risk, decreasing acute and late toxicities. The aim of this study was to evaluate the impact of neoadjuvant chemoradiotherapy (CRT) in elderly patients.

#### Material and Methods

Between 2000 and 2018, 117 (M:80;W:37) locally advanced rectal cancer patients, with  $\geq 70$  years, were treated in our Radiotherapy Department and retrospectively analysed. They received concurrent fluoropyrimidine based chemotherapy. RT was performed by 3D conformal technique, with a dose of 4500 cGy, on the pelvic nodes, followed by a sequential boost or a concomitant boost. Mandard tumor regression grade (TRG) score was used to evaluate the pathologic response. The evaluation of anal sphincter function was obtained according to the Memorial Sloan-Kettering Cancer Center (MSKCC) score. Acute and late toxicities were assessed using the Radiation Therapy Oncology Group (RTOG) scale and the RTOG/European Organization for Research and Treatment of Cancer (EORTC) late radiation scoring system. The 3-year and 5-year local control (LC), disease-free survival (DFS) and overall survival (OS) rates were calculated using the Kaplan-Meier method.

#### Results

Median follow-up was 45 months (range:1-163). The median age was 75 (range: 70-88). One hundred and three (88%) patients had ECOG PS 0. Sixty (51.3%) patients were staged as T3-T4 and/or N+. Eighty-three (70.9%) patients were treated with a sequential boost, with a total dose of 5040 cGy, whereas 34 (29.1%) received a concomitant boost of 1000 cGy (100 cGy/die, 2 times/week, total dose 5500 cGy). A pathological complete response (TRG 1) was obtained in 23 patients (19.7%). Acute toxicities were reported in Table 1. Twenty-four patients (20.5%) were lost to the follow-up. Ninety-four (80.3%) patients were evaluated for late toxicities. Overall sphincter function resulted excellent in 23 (24.5%) patients, good in 3 (3.2%), fair in 6 (6.4%) and poor (incontinence) in 11 (11.7%) patients. Twenty-three (24.5%) patients presented stoma. One patient presented late skin toxicity  $\geq G3$  and 2 late GI toxicity  $\geq G3$ . The 3-year DFS and OS rates were 82.8% $\pm$ 4.2% and 86.5% $\pm$ 3.8%, respectively. The 5-year LC, DFS and OS rates were 89.5% $\pm$ 3.9%, 73.3% $\pm$ 5.2% and 78.1% $\pm$ 5.0%, respectively.

Table 1. Acute Toxicities

Acute Toxicities	G0	G1	G2	G3
Skin Toxicity	63 (53.8%)	22 (18.8%)	31 (26.5%)	1 (0.9%)
GI Toxicity	37 (31.6%)	39 (33.3%)	39 (33.3%)	2 (1.8%)
GU Toxicity	88 (75.2%)	26 (22.2%)	3 (2.6%)	0 (0%)
Hematologic Toxicity	94 (80.4%)	10 (8.5%)	10 (8.5%)	3 (2.6%)

#### Conclusion

Our results reported good tolerability, in terms of acute and late toxicities and clinical outcomes, of neoadjuvant CRT in patients 70 years. Based on our analyses, elderly patients with good PS can be also considered to be treated with a concomitant boost intensification in presence of very unfavourable prognostic factors.

#### EP-1648 Radio-chemotherapy with temozolomide in elderly patients with glioblastoma: our experience

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#### Purpose or Objective

Glioblastoma multiforme (GBM) is the most aggressive brain tumor in adults and the second most common brain cancer after meningioma with a peak of incidence on the fifty decades of life. Due to the progressive ageing of the developed country population, more than a half of new cases occurs in patients older than 65 years. The aim of the present study was to evaluate the clinical outcome of radio-chemotherapy with temozolomide in patients with glioblastoma aged more than 65 years.

#### Material and Methods

Sixty-three patients treated with radiotherapy and chemotherapy at Pisa University Hospital between September 2004 and November 2017 were enrolled in this retrospective analysis. All patients had a proven diagnosis of glioblastoma grade IV WHO, ECOG PS 0-2, age  $\geq 65$ . Radiotherapy was delivered in daily fractions of 2 Gy given 5 days per week for 6 weeks, for a total of 60 Gy. During radiotherapy, temozolomide was administered at a dose of 75 mg per square meter of body-surface area per day from the first to the last day of radiotherapy. 5-6 weeks after the end of radiotherapy, adjuvant temozolomide was administered at 150-200 mg per square meter for five consecutive days, every 28 days. A maximum of 12 cycles were prescribed if MRI showed no disease progression and temozolomide was well tolerated.

#### Results

Data analysis was performed in April 2018. The present study was performed in 37 male and 26 female patients with a median age at diagnosis of 72,5 years (range=65-89). Fifty-seven patients underwent surgical resection, four patients stereotactic diagnostic biopsy, two patients had a radiologic diagnosis only. During follow up, we recorded 46 cases of disease progression with a median progression-free survival (PFS) of 12 months (range 1-88 months). Median overall survival (OS) were 25 months (range 1-107 months); at data analysis, 65 patients were died. After disease recurrence, based on ECOG, tumor burden and age, patients were treated with surgery (15 cases), chemotherapy (30 cases) and re-irradiation (11 cases).

#### Conclusion

In our experience, progression free survival and overall survival were similar to those reported in literature for younger patients. We think that radiochemotherapy is a good option for older patients with a good performance status in glioblastoma treatment.