Radiochemotherapy with Temozolomide in elderly patients with Glioblastoma.

A. Fiorentino, C. Chiumento, R. Caivano, M. Cozzolino, V. Fusco.
INTRODUCTION

Epidemiology of Brain Tumors

Table 1
Number of cases, median ages at diagnosis, and age-adjusted average annual (1998-2002) incidence rates of primary brain tumors (major histologic groupings and selected histologic subtypes), according to gender.
INTRODUCTION

Effects of radiotherapy with concomitant and adjuvant temozolomide versus radiotherapy alone on survival in glioblastoma in a randomised phase III study: 5-year analysis of the EORTC-NCIC trial

EORTC-NCIC trial
enrolled patients under 70
INTRODUCTION

Who Are They?

Only Age?
INTRODUCTION

Radiotherapy Plus Concurrent or Sequential Temozolomide for Glioblastoma in the Elderly: A Meta-Analysis

PLoS ONE 8(9): e74242. doi:10.1371/journal.pone.0074242

Elderly patients with glioblastoma: the treatment challenge


Contraversies in the Treatment of Elderly Patients With Newly Diagnosed Glioblastoma

J Natl Compr Canc Netw 2013;11:1165-1173
Impact of age and co-morbidities in patients with newly diagnosed glioblastoma: a pooled data analysis of three prospective mono-institutional phase II studies

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Comorbidity assessment and adjuvant radiochemotherapy in elderly affected by glioblastoma

Factors to consider include age,
METHODS

- Patients older than 65 affected by GBM
- Surgery plus radiochemotherapy and adjuvant Temozolomide
- RT total dose: 60Gy in 30 fractions (standard) or 67Gy in 15 fractions (AIRO IMRT-SIB protocol)
- Comorbidity evaluation (Charlson Comorbidity Index)
METHODS

- 52.5 Gy
- 67.5 Gy
- 60 Gy

- TMZ concomitante ed adiuvante

- Standard

SIB
## RESULTS

<table>
<thead>
<tr>
<th>From April 2005 to December 2012</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patients</td>
<td>50 (100)</td>
</tr>
<tr>
<td>Median age (range)</td>
<td></td>
</tr>
<tr>
<td>&lt; 70</td>
<td>72 (65-81)</td>
</tr>
<tr>
<td>≥ 70</td>
<td>15 (30)</td>
</tr>
<tr>
<td></td>
<td>35 (70)</td>
</tr>
<tr>
<td>Complete surgery</td>
<td>16 (32)</td>
</tr>
<tr>
<td>Partial surgery</td>
<td>28 (56)</td>
</tr>
<tr>
<td>Biopsy</td>
<td>6 (12)</td>
</tr>
<tr>
<td>RT standard</td>
<td>47 (94)</td>
</tr>
<tr>
<td>RT SIB</td>
<td>3 (6)</td>
</tr>
<tr>
<td>Adjuvant TMZ</td>
<td>22 (44)</td>
</tr>
<tr>
<td>CCI &lt; 3</td>
<td>20 (40)</td>
</tr>
<tr>
<td>CCI ≥ 3</td>
<td>30 (60)</td>
</tr>
</tbody>
</table>
RESULTS: Compliance and toxicity

RT Compliance del 94%

Toxicity was mild:
- G3-4 Thromocytopenia in 6 patients
- G3 Neurological toxicity in 4 patients
RESULTS: Survival and Comorbidity

P = 0.004

Median survival 13 months
Median PFS 8 months
CONCLUSION

- Radiochemotherapy and adjuvant Temozolomide is a safe and effective treatment.

- Age is NOT the only factor to choose or not a treatment

- Comorbidity could be a feasible clinical tool to define fit and unfit elderly patients.
Thanks for your attention