

OC-0600 Assessment of non-adherence to external radiotherapy treatment in cancer patients in Catalonia, Spain

J.M. Borras¹, R. Font², J. Solà², M. Macià³, M. Arenas⁴, R. Verges⁵, A. Eraso⁶, V. Tuset⁶, A. Biete⁷, J.M. Solé⁸, N. Farré⁹, A. Pedro¹⁰, M. Mira¹¹, J.A. Espinàs²

¹University of Barcelona, Clinical Sciences, Catalonia, Spain; ²IDIBELL, Pla Director d'Oncologia, Catalonia, Spain; ³Catalan Institute of Oncology, Catalan Institute of Oncology, Catalonia, Spain ; ⁴Hospital Sant Joan de Reus, Hospital Sant Joan de Reus, Catalonia, Spain ; ⁵Hospital Universitari de la Vall d'Hebron, Hospital Universitari de la Vall d'Hebron, Catalonia, Spain ; ⁶Institut Català d'Oncologia, Institut Català d'Oncologia, Catalonia, Spain; ⁷Hospital Clínic de Barcelona, Hospital Clínic de Barcelona, Catalonia, Spain ; ⁸Consorci Sanitari de Terrassa, Consorci Sanitari de Terrassa, Catalonia, Spain; ⁹Hospital de la Santa Creu i Sant Pau, Hospital de la Santa Creu i Sant Pau, Catalonia, Spain ; ¹⁰Hospital Clínica Plató, Hospital Clínica Plató, Catalonia, Spain ; ¹¹Hospital Arnau de Vilanova, Hospital Arnau de Vilanova, Catalonia, Spain

Purpose or Objective

Non-adherence to external radiotherapy is an aspect of treatment which has not been fully explored. The objective of this study is to analyse the relevance of this problem and its impact on 1-year survival

Material and Methods

A Cohort study design was carried out with a prospective follow-up of cancer patients with indication of external radiotherapy. All patients with indication of treatment during year 2016 in the hospital of the public sector in Catalonia were included. Adherence was deemed acceptable if total dose received was over 90% of the dose prescribed. Statistical analysis was performed according to type of tumour, intention of treatment and age. Logistic regression was carried out to assess factors associated to adherence and Cox analysis was applied to assess their relationship with survival

Results

In total, 15.157 patients were included with an average age of 64.6 (\pm 14.0); 51.3% were males. Most frequent tumours were breast (27.4%), lung (16,1%) and prostate (12.4%). Radical intent was indicated in 69.2% of cases and 18.7% of patients received concomitant chemo. At least one day interruption of treatment, excluding public holidays, was observed in 41.8% of cases. The reasons (multiple choice) for these interruptions were, 75.8% due to problems with the equipment, 17.9% for medical reason, 7.9% due to the patient preference and 20.9% for others reasons. Patient adherence was of 95.5% of patients (receiving more than 90% of total dose). Radical intent was related (OR: 3.11; IC: 95%: 2.6-3.7) to better adherence. Older age was associated with lower probability of adherence. Head and neck, lung, digestive other than rectal and bone (including metastasis) cancers were associated with lower probability of adherence; while breast and prostate cancer patients were associated with significantly higher than average adherence. One-year survival was significantly higher among adherent patients, both in radical (HR: 4.5; IC95%:3.8-5.4) and palliative (HR: 2.1; IC95%:1.8-2.4) intent

Conclusion

Adherence of treatment is very high among this cohort of population based patients receiving treatment in the public sector in Catalonia. Lack of adherence is related to lower probability of survival and this factor should be considered in the follow-up of patients with radiotherapy treatment