Prospective Analysis of Patient Reported Symptoms and Quality of Life in Patients with Incurable Lung Cancer Treated in a Rapid Access Clinic

Shilo Lefresne 1

1. Radiation Oncology, British Columbia Cancer Agency, Prince George, CAN

Corresponding author: Shilo Lefresne, slefresne@bccancer.bc.ca

Categories: Radiation Oncology
Keywords: palliative radiotherapy, rapid access clinics, lung cancer

Abstract

Shilo Lefresne 1, Robert Olson 2, Rosemary Cashman 1, Will Jiang 3, Paula Kostuik 1, Karen Levy 1, Mitchell Liu 1, Hannah Carolan 1, Michael McKenzie 1, Eric Berthelet 1

1British Columbia Cancer Agency, Vancouver, BC
2British Columbia Cancer Agency, Prince George, BC
3University of British Columbia, Vancouver, BC

Purpose: The Vancouver Rapid Access (VARA) clinic provides palliative radiotherapy (RT) and holistic care to patients with newly diagnosed, incurable lung cancer. Prior analysis of the clinic’s pilot phase demonstrated improved RT wait-times and access to ancillary services compared to standard practice. The current study aims to prospectively assess the impact of VARA on patient reported symptoms and quality of life.

Materials and Methods: Assessments are completed at baseline and by telephone four weeks post-RT by a nurse practitioner using Likert scales adapted from the Edmonton Symptom Assessment System (scale 0-10) and EORTC questionnaires (scale 1-4). Patient reported outcomes at follow-up are compared to baseline using wilcoxon signed-rank test for categorical variables and paired sample t-test for continuous variables.

Results: From March 22 to December 27, 2013, baseline data was collected on 78 patients. Palliative RT was delivered to 86% of the patients. Forty-six percent, 37% and 19% of patients received RT to the chest, bone, and brain respectively. Eighteen percent of patients had RT to more than one anatomic site. Follow-up was completed on 55 patients (71%). Median follow-up time from the initial consult was 43 days (range 31-77). The median Palliative Performance Status increased from 50 to 65 (p=0.97). The median patient reported overall health score, improved from 5 to 7 (p=0.07). Among patients who received chest RT, 88% reported stable or improved levels of shortness of breath following RT with a median score of 3 prior to treatment, and 2 post-treatment (p=0.01) and 91% reported stable or better cough compared with a median baseline score of 2 and 1 post-treatment (p=0.01). In patients who received RT for bone metastases, median pain scores decreased from 4 to 0.5 (p=0.01). Compared to baseline, bone pain was more likely to be relieved by an analgesic following RT (p=0.07) and less likely to interfere with sleep (p=0.03). Daily dexamethasone consumption decreased from 7mg to 1.3mg following whole brain RT (p<0.01). The three- and six-month overall survival was 63% and 52%


respectively; median survival was not met at time of analysis.

Conclusions: Despite the profound burden of symptoms that VARA patients present with at initial consultation, the services provided by the clinic seemed to be associated with an improvement in patient reported outcomes. Overall health, respiratory symptoms and bony pain in particular seem to improve at follow up. These positive findings, combined with prior evidence that the VARA clinic improves the delivery of care to this patient group when compared to standard practice, highlight the continued value of the clinic at our centre and may provide support for extending this clinic model to other primary tumour sites.