Original Article

Symptom Prevalence in Lung and Colorectal Cancer Patients

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Abstract

Context.. Relatively few data are available about symptoms among cancer patients.

Objectives. To describe the prevalence and severity of symptoms among a large, representative cohort of newly diagnosed cancer patients.

Methods. We collected survey data about symptoms (pain, fatigue, depression, nausea/vomiting, cough, dyspnea, and diarrhea) from 5422 patients with incident lung and colorectal cancer from the diverse, nationally representative Cancer Care Outcomes Research and Surveillance Consortium cohort. We described the prevalence of any symptoms and moderate/severe symptoms approximately four to six months after diagnosis. We used logistic regression to identify patient and clinical characteristics associated with symptoms, and calculated adjusted proportions of patients with symptoms.

Results. In total, 5067 (93.5%) patients reported at least one symptom in the four weeks before their survey, with 51% reporting at least one moderate/severe symptom. Lung cancer patients reported more symptoms than colorectal cancer patients. Patients who received treatment or had more comorbidities were more likely to report symptoms. For example, after adjustment, patients who received chemotherapy during the six weeks before the survey were more likely than others to report at least one symptom (97.3% vs. 90.8%, $P < 0.001$), and at least one

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Some of the preliminary data from this study were presented at the American Academy of Hospice and Palliative Medicine Annual Meeting in March 2012.

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moderate/severe symptom (56.8% vs. 46.2%, $P < 0.001$). After adjustment, early- vs. late-stage patients did not differ in reports of at least one symptom (93.6% vs. 93.4%, $P = 0.853$) and differed only slightly in reports of at least one moderate/severe symptom (53.3% vs. 49.6%, $P = 0.009$).

Conclusion. Most recently diagnosed lung and colorectal cancer patients have cancer-related symptoms regardless of stage, and more than half have at least one moderate/severe symptom. J Pain Symptom Manage 2015;49:192−202. *Published by Elsevier Inc. on behalf of American Academy of Hospice and Palliative Medicine.*

Key Words

Cancer, symptoms, prevalence, colorectal neoplasms, lung neoplasms

Introduction

Quality of life is increasingly recognized as an important outcome for cancer patients both in research and in clinical practice,[1−6] and quality of life is integrally related to the symptoms that patients experience. In classic medical training, symptoms are important because they provide subjective information that leads to the diagnosis of medical problems and treatment of disease.[7] Often, treatment of disease is aimed at cure or prolonged survival, and resolution of symptoms is a valued byproduct of the treatment. However, in a patient-centered approach to disease, symptoms are the patient's experience of a disease and, therefore, become more central in the overall treatment plan for the patient. This is especially important in cancer patients where symptoms are often caused by both the disease itself and the side effects and toxicities of treatment.

In 2002, a National Institutes of Health State of the Science Report on management of cancer symptoms, including pain, fatigue, and depression, identified the need for research on the occurrence, assessment, and treatment of cancer symptoms occurring alone and together.[8] Although several studies have assessed symptoms in a cancer population, most are relatively small and geographically limited.[9−18] A systematic review of studies assessing symptoms in patients with incurable cancer not undergoing active treatment found that patients with advanced cancer described many symptoms, most notably pain and fatigue.[3] A recent Canadian study linked routinely collected Edmonton Symptom Assessment System (ESAS) data with administrative data to describe one of the first estimates of symptom prevalence in a population-based cohort of cancer patients.[19] Although this study filled important gaps in our knowledge by providing estimates of the prevalence of symptoms in a heterogeneous cohort of cancer patients attending an oncology clinic for treatment or survivorship care, it did not include data on stage of disease, timing of assessment relative to treatment, and other factors that may influence the burden of symptoms across the continuum of cancer care. Similarly, a 2013 study by Cleeland et al[20] assessed symptoms for patients presenting for an ambulatory clinic visit during any point in their disease trajectory using the M. D. Anderson Symptom Inventory.

Using data from the diverse, nationally representative Cancer Care Outcomes Research and Surveillance (CanCORS) study, we assessed the prevalence and severity of self-reported symptoms, including pain, fatigue, depression, nausea/vomiting, cough, dyspnea, and diarrhea, among patients approximately four to six months after diagnosis with lung or colorectal cancer. This multisite incident cohort provides the opportunity to analyze a large number of patients at approximately the same point in time of their disease trajectory. Using these data, we present prevalence data adjusted for patient characteristics, including stage of disease and types of treatments received.

Methods

Study Population

Data for this study were collected as part of the CanCORS study, a demographically representative national study of the care and outcomes experienced by approximately 10,000