EXCESS MORTALITY AND COSTS ASSOCIATED WITH SERIOUS FUNGAL INFECTIONS AMONG ELDERLY CANCER PATIENTS: FINDINGS FROM LINKED SEER-MEDICARE DATA

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OBJECTIVES: Systemic fungal infections are becoming increasingly common, particularly among immunocompromised patients. Our objective was to examine the clinical and economic effects of these infections.

METHODS: This study involved a retrospective cohort analysis of the excess mortality, length of stay (LOS), and costs attributable to serious fungal infections among hospitalized elderly patients with acute myeloid leukemia (AML). Linked data from the Surveillance, Epidemiology and End Results (SEER) Program of the National Cancer Institute and Medicare claims data were used for the analysis. Study cohorts included patients aged 65 years and older who were newly diagnosed with AML between 1991 and 1996 and who developed a serious fungal infection (defined by selected ICD-9-CM codes) during an inpatient hospitalization (N = 80), and matched (1:1) hospitalized controls who did not develop a fungal infection. Matching variables included factors expected to influence LOS, including age, geographic region, timing of hospitalization, recent treatment with chemotherapy, and presence of a concomitant bacterial infection.

RESULTS: Average age in both cohorts was 72.9 years. Groups were similar on key non-matched characteristics, including chronic comorbidities and metropolitan residence. Patients with serious fungal infections had higher in-hospital mortality than controls (36% vs. 25%; p = 0.12), longer LOS (mean ± SD: 31 ± 19 vs. 20 ± 15; median: 27 vs. 16; p < 0.0001) and more ICU days (mean ± SD: 2.7 ± 7 vs. 1.9 ± 6; p = 0.22). Medicare payments (in 1998 US dollars) also were significantly higher among patients with fungal infections (mean ± SD: $34,217 ± 31,821 vs. $22,547 ± 17,000 for controls; median: $25,930 vs. $19,661; p < 0.01), with a larger difference noted between groups when mean hospital charges were assessed ($110,382 vs. $60,259; p < 0.0001). The rate of rehospitalization for any reason within 30 days was nearly identical in the 2 groups (47%).

CONCLUSIONS: The excess mortality and LOS attributable to serious fungal infections are substantial, a finding likely to be of interest to clinicians and hospital administrators.
ues to change as new chemotherapy agents are developed. These results suggest that therapies that avoid or ameliorate the most troublesome side-effects would be preferred agents.

AN APPRAISAL OF TREATMENT SATISFACTION AND PATIENT PREFERENCE ASSESSMENTS IN PATIENTS DIAGNOSED WITH CANCER

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OBJECTIVES: Various disease specific instruments exist to measure treatment satisfaction and patient preference. Subsequently, data from these instruments have been used to differentiate treatment options. Several measurements exist to assess satisfaction with oncology care, but few tools exist to measure satisfaction with or preferences for oncology treatments. As the paradigm in oncology shifts from treating and managing cancer as a terminal disease to a chronic disease and with an increasing number of treatment options, the need to assess patients’ perceptions and preferences regarding treatment becomes more evident. The purpose of this study was to review and compare characteristics of instruments within oncology studies that assessed aspects of treatment satisfaction and patient preference.

METHODS: Publications involving oncology patients, treatment satisfaction, and patient preference were identified through the search of available literature within MEDLINE and CANCERLIT.

RESULTS: The search did not identify a comprehensive patient treatment satisfaction instrument. Selected findings included the preference for: oral rather than intravenous medication; treatment at home over outpatient clinic care; and follow-up care with primary physicians rather than oncologists. Findings with respect to patient preference for using chemotherapy revealed that survival and toxicity trade-off differed between patients with different tumor types. Breast cancer patients are more willing to accept aggressive treatment with severe side effects in exchange for minimal to no increase in survival rates. Non-small cell lung cancer patients, on the other hand, are not as willing to undergo chemotherapy and prefer a significant increase in survival duration with minimal toxicity.

CONCLUSIONS: Various techniques have been used to assess aspects of patient satisfaction and preference with treatment. However, the application of these instruments in oncology is not yet widespread. The availability of a tool that combines these measurements into one instrument would be valuable when evaluating new therapies compared to standard of care regimens.