

Adjuvant Chemotherapy for Patients with Stage III Colon Cancer: Preliminary Results from the NPCR Patterns of Care Study

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Introduction

- Colorectal cancer is the second most frequent cause of cancer death in the US
- Adjuvant chemotherapy has been shown to improve survival for patients with Stage III colon cancer
- However some studies have suggested that many eligible patients do not receive adjuvant treatment after surgery

Introduction

- As part of a Patterns of Care study funded by the Centers for Disease Control, National Program of Cancer Registries, we assessed adjuvant treatment of Stage III colon cancer for patients diagnosed during 1997 in seven collaborating states.

Methods

- Overall methods for this study have been presented in detail elsewhere
- Participating state registries included California, Colorado, Illinois, Louisiana, New York, Rhode Island, South Carolina , and Washington DC.
- The study was coordinated by CDC staff

Methods

- Patients included in the current analysis:
 - Stage III invasive colon cancer
 - First primary malignancy
 - Lymphoid and carcinoid tumors excluded
 - Received cancer-directed surgery
 - Diagnosed in 1997

Methods

- Hospital medical records were re-abstracted by trained staff in each state using a common data entry form
- Demographic, diagnostic, staging and treatment data were obtained for each patient
- Hospital charts were supplemented with information from physician offices

Methods

- Comorbid illness was identified using ICD-9 codes contained in medical records
- Patient addresses were geocoded, and socioeconomic status (poverty, education and occupation) was assigned based on census tract of residence
- Patients followed up through 12/31/02

Preliminary Results

- 1060 eligible patients were identified
- 76% of patients were non-Hispanic white
- 37% were age 75 or older
- 55% were married
- 70% were covered by private health insurance
- 27% lived in census tracts where more than 20% of residents were below the 2000 poverty level

Results (preliminary)

- A total of 59% of patients (62% male, 57% female) received adjuvant chemotherapy.
- The proportion receiving treatment declined from 83% in patients under age 50 to 34% among patients aged 75 or older
- Patients with public health insurance were less likely to have received treatment than those with private insurance (50% vs 62%)

Results-- Multivariate analysis

- 992 patients had complete information on treatment and other variables
- The multivariate model include age, race/ethnicity, sex, marital status, health insurance, urban-rural residence, poverty, education, working class residence, and presence of comorbidities

Results-- Multivariate analysis

- Patients over age 75 were substantially less likely than those age 65-74 to have received adjuvant chemotherapy:
 - $OR=0.239$, 95% $CI= 0.166-0.343$
- Patients who were single were less likely than married patients to have received treatment
 - $OR=0.554$, 95% $CI= 0.329-0.934$

Results-- Multivariate analysis

- Patients residing in census tracts where 25% or more of adults had less than a high school education were less likely than other patients to have received treatment
 - **OR=0.542, 95% CI= 0.357-0.823**

Results-- Multivariate analysis

- Patients with 2 or more comorbid illnesses were less likely to have received treatment than those with no comorbid illness.
 - $OR=0.396$, 95% $CI= 0.216-0.727$

Results-- Multivariate analysis

- Race/ethnicity, sex, health insurance, urban-rural residence, and residence in census tracts classified as in poverty or working class did not have a statistically significant effect on probability of treatment after adjustment for other factors.

Conclusions

This study confirms results from other studies that show that only about 60% of patients received adjuvant treatment for Stage III colon cancer.

Older patients, those with less education, and those with comorbid illness were less likely to receive chemotherapy

Marital status also influenced receipt of treatment

Conclusions

- Race, gender, poverty and lack of health insurance did not appear to influence treatment.
- Further analysis of these data, including survival analysis, is ongoing and results will be published.

Limitations

- Time since diagnosis made it difficult to access medical records

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