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Congress Abstract

Assessment of Process Quality Indicators for Adjuvant Chemotherapy in Stage III Colon Cancer

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Background: Adjuvant chemotherapy is the standard of care after radical resection of stage III colon cancer. Key process quality indicators include the use of standard regimens, timely treatment initiation, treatment completion, and documentation of reasons for deviations. In Kazakhstan, data on these indicators and regional patient pathways remain limited.

Objective: To assess process quality indicators of adjuvant chemotherapy after radical surgery, taking into account subsequent treatment provided at the patients' place of residence.

Materials and Methods: This single-center retrospective cohort study included 45 patients aged ≥18 years with morphologically confirmed stage III colon cancer who underwent radical resection at the National Scientific Oncology Center between January 9, 2021, and December 5, 2023. Patients with distant metastases at surgery, prior neoadjuvant chemotherapy, or rectal cancer were excluded. Subsequent treatment was mainly provided at the patients' place of residence, and data were retrieved from medical records. We assessed treatment administration, reasons for non-initiation, use of standard regimens, time to treatment initiation, proportion of planned cycles completed, and reasons for non-completion. Descriptive statistics were performed using IBM SPSS Statistics. Interregional comparisons were not performed due to small and uneven subgroup sizes.

Results: Adjuvant chemotherapy was administered to 36/45 patients (80.0%). Among nine untreated patients, one had medical contraindications, one refused treatment, and the reason was undocumented in seven. Standard regimens were used in 34/36 patients (94.4%). Among 34 patients with available timing data, median time to treatment initiation was 5.4 weeks (range, 1.0–11.7), and 31 (91.2%) started within 8 weeks. Among 34 patients with data on planned cycles, the median proportion of completed cycles was 70.8% (range, 25.0–100.0%); 15 (44.1%) completed the full course and 17 (50.0%) received ≥75% of planned cycles. Among 19 patients who did not complete treatment, reasons included progression in seven, toxicity in three, and coronavirus infection, drug unavailability, and death due to stroke in one case each; the reason was undocumented in six. Patients represented 12 regions, with subgroup sizes of 1–18 patients.

Conclusions: Most patients received standard adjuvant chemotherapy and initiated treatment within the recommended timeframe; however, fewer than half completed the full planned course. Reasons for non-completion were heterogeneous and should not be interpreted as a single marker of inadequate quality of care. Incomplete documentation and interregional patient pathways limited the assessment. Expansion of the registry and standardized data exchange are required for further analysis.

Keywords: Colonic Neoplasms; Chemotherapy, Adjuvant; Quality Indicators, Health Care; Treatment Outcome; Retrospective Studies