

Adjuvant Chemotherapy in Non Small Cell Lung Cancer (NSCLC): referral and utilization patterns

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Background: Adjuvant chemotherapy in Non Small Cell Lung Cancer (NSCLC) has recently become a new standard of care. However, referral and utilization patterns for adjuvant chemotherapy outside of clinical trials remain unknown.

Methods: All patients with NSCLC who underwent curative-intent surgery in Nova Scotia, Canada, in year 2005 were identified. Data were abstracted from the provincial cancer registry, and the patients' charts at the two provincial cancer centers. A retrospective exploratory analysis was conducted utilizing logistic regression models to determine the statistically significant variables associated with referral to medical oncology and/or utilization of adjuvant chemotherapy.

Results: A 108 patients who underwent curative-intent surgery (67% lobectomy, 15% pneumonectomy, and 19% wedge resection) for NSCLC (38% IA, 23% IB, 4% IIA, 21% IIB, 12% IIIA, and 2% IIIB) were identified. The median age was 66 years, and 56% were males. Common histologies included adenocarcinoma (43%), squamous cell carcinoma (32%), large cell carcinoma (7%), and bronchoalveolar carcinoma (7%). A referral to medical oncology for consideration of adjuvant chemotherapy was observed in 41% (44/108) of all patients including 62% (41/66) of those with stage > IA. Lower referral rate was associated with older age, stage I, and wedge resection while higher referral rate was associated with younger age, more advanced stage, large cell carcinoma subtype, and pneumonectomy. Adjuvant chemotherapy was prescribed in 27% (29/108) of all patients, including 41% (27/66) of those with stage > IA, and in 66% (29/44) of the patients referred to medical oncology. Of those referred to medical oncology, older patients and those who underwent wedge resection were less likely to receive chemotherapy. Of all patients, higher chemotherapy utilization was associated with younger age and more advanced stages.

Conclusions: Adjuvant chemotherapy utilization in patients with resected NSCLC is low overall, especially among older patients and those with early-stage disease. However, a high proportion of the patients referred to medical oncology receive chemotherapy. Improved referral rates to medical oncology may increase the overall utilization rates of adjuvant chemotherapy in NSCLC.