

INDIGENOUS LUNG CANCER PATIENTS HAVE LOWER RATES OF SURGERY DESPITE YOUNGER AGE

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Background

Surgery is a curative treatment option for early stage lung cancer. We compared the rate of surgery among indigenous and non-indigenous lung cancer patients controlling for differences in demographic and clinical characteristics.

Methods

Cancer diagnoses and surgery data on 249 indigenous and 12,147 non-indigenous Queensland residents diagnosed with non-small cell lung cancers (NSCLC) between 2001 and 2010 was extracted from the Queensland Oncology Repository. The proportion of patients who underwent resectional surgery to treat lung cancer was analysed and compared between indigenous and non-indigenous populations using logistic regression controlling for age, sex, remoteness of residence, tumour histology (squamous vs non-squamous carcinomas), and comorbidities.

Results

Indigenous lung cancer patients were younger (median age 62 yrs vs 69 yrs) and had higher proportion of females (39% vs 35%), squamous carcinomas (30% vs 26%), and persons with comorbidities (55% vs 49%) compared to non-indigenous patients. Overall lung cancer surgery rates were 10% for indigenous and 20% for non-indigenous patients. The rate was lower among indigenous patients even after adjustment for age, sex, histology, and comorbidity; the adjusted odds ratio (OR) of cancer surgery in indigenous relative to non-indigenous patients was 0.39 (95% confidence interval [CI]: 0.25-0.60).

Conclusion

There is a lower rate of surgical resection for NSCLC in indigenous patients. Whilst there are likely to be numerous reasons for this finding, particularly late presentation with advanced stage making resection inappropriate, further study is needed to ascertain that the difference is not due to limited access to cancer services.