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| **Hospital admission rates and related outcomes among adult Aboriginal Australians with bronchiectasis in the Top End Northern Territory Australia** |
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| **Introduction/Aim:** To assess the temporal trends in hospitalisation rates and related outcomes in an adult Aboriginal Australian cohort with bronchiectasis over a ten-year period in the Top End Northern Territory of Australia.**Methods:** A retrospective longitudinal analysis of 459 Indigenous Australians aged >18 years with chest CT confirmed bronchiectasis between 2011 and 2020. Clinical parameters and hospital admissions restricted to respiratory conditions as per International Classification of Diseases (ICD) classification were assessed and compared between those with and without hospital admissions.**Results:** 398 (87%) recorded at least one respiratory related hospitalisation during the 10-year window. In comparison to patients with no hospital admissions, admitted patients were older (median 53 vs 56 years), had lower BMI (23 vs 26 kg/m2), greater prevalence of COPD (88 vs 47%), reduced FVC (median 49 vs 63%) and FEV1 (median 36 vs 55%). Admitted patients recorded 3,123 admissions (median 4 (IQR 2, 10)), at a median rate of 1 /year (IQR 0.5, 2.2) with a median admission length of 3 days (IQR 1, 6), and median total time in hospital of 21 days (IQR 9, 52). For ICD code separations COPD with lower respiratory tract infection (J44) were the most common (69%), while ICD separations for pneumonia (J15) and respiratory failure (J96) had the longest stays in hospital per visit (median 6 & 7 days respectively). In regression models, presence of COPD and asthma were associated with significantly reduced lengths of time between hospital admissions.**Conclusion:** Comorbid COPD is the major driver for hospital admissions among Indigenous patients with bronchiectasis. Identifying these patients and addressing respiratory disease at primary health care level may aid in reducing recurrent hospital admissions and health care cost.**Grant Support:** This research received the TSANZ - Robert Pierce Grant-In-Aid for Indigenous Lung Health. The TSANZ did not have any role in the study design, data collection, analysis, or interpretation. |