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| **Describing the idiopathic inflammatory myopathy population in the Australasian Interstitial lung disease registry** |
| Andre Chobanian1, Matthew Parker1,22, Ian Glaspole2, Margaret Wilsher3, Jeremy Wrobel4, Yuben Moodley4, Francis Thien5, Henry Gallagher6, Michelle Galbraith6, Daniel Chambers7, John Mackintosh7 Nicole Goh8, Yet Khor8, Sally de Boer3, Adrienne Edwards9, Karen Royals10, Christopher Grainge11, Benjamin Kwan12, Gregory Keir13, Chong Ong14, Paul Reynolds15, Elizabeth Veitch16, Alan Teoh17, Jason D’Costa18, Eli Gabbay19, Irene Moore20*,*Fiona Lake21*,*Lauren Troy22, Tamera Corte1,22 |
| *1The University of Sydney, NSW, Australia, 2Alfred Hospital, VIC, Australia, 3Auckland City Hospital, NZ, 4Fiona Stanley Hospital, WA, Australia, 5Eastern Health Box Hill Hospital, VIC, Australia, 6Waikato Hospital, NZ, 7The Prince Charles Hospital, QLD, Australia, 8The Austin Hospital, VIC, Australia, 9Christchurch Hospital, NZ, 10Queen Elizabeth Hospital, SA, Australia, 11John Hunter Hospital, NSW, Australia, 12Sutherland Hospital, NSW, Australia, 13Princess Alexandra Hospital, QLD, Australia, 14St Vincent’s Hospital Melbourne, VIC, Australia, 15Royal Adelaide Hospital, SA, Australia, 16Concord Hospital, NSW, Australia, 17Westmead Hospital, NSW, Australia, 18Flinders Medical Centre, SA, Australia, 19St John of God Subiaco Hospital, WA, Australia, 20Royal Perth Hospital, WA, Australia, 21Sir Charles Gairdner Hospital, WA, Australia, 22Royal Prince Alfred Hospital, NSW, Australia* |
| **Introduction/Aim:** Interstitial lung disease (ILD) is the major cause of mortality in patients with idiopathic inflammatory myopathies (IIM) and can be the main organ manifestation. Despite this, ILD is not included in current classification criteria for IIM. This study aims to describe the IIM cohort in the Australasian ILD registry (AILDR).**Methods:** Participants from the AILDR were included who had a diagnosis of IIM and/or a positive myositis-specific or myositis-associated autoantibody. Data on demographics, medical history, investigations and management were extracted and reviewed independently by two investigators and then stratified into pre-defined groups based on the likelihood of IIM. Groups were further classified into IIM subtypes (anti-synthetase syndrome (ASSD), dermatomyositis, immune-mediated necrotising myopathy (IMNM), overlap myositis (OM), polymyositis).**Results:** Of the 3193 patients in the AILDR, 241 (7.5%) with IIM were identified. Mean age was 59.9±14.8 (SD) years and 123 (51.0%) were female. 114 (47.3%) were considered ASSD, 49 (20.3%) dermatomyositis, 4 (1.7%) IMNM, 52 (21.6%) OM and 22 (9.1%) polymyositis. The most common autoantibodies were anti-Jo1 (18.3%), anti-PL7 (14.9%) and anti-PM/Scl75 (13.3%). Autoantibody prevalence within IIM subtypes is conveyed in Figure 1. Regarding respiratory symptoms, dyspnoea (n=149) and cough (n=115) were recorded most. GORD/dysphagia was the commonest extrapulmonary feature (n=63) followed by rash/skin changes (n=37), and Raynaud's phenomenon (n=33). Regarding management, 147 records noted the use of an immunomodulator, particularly for ASSD (n=73, 64.0% of subtype). 33 noted anti-fibrotic use, most frequently for dermatomyositis (n=11, 22.4% of subtype). 12 were on combined immunomodulator and anti-fibrotic therapy. Oxygen therapy was used in 60 records (24.9%) including 30 with ASSD, 8 dermatomyositis and 12 OM. **Conclusion:** IIM accounts for 7.5% of cases in the AILDR. Although similarities exist between these patients and other cohorts described, there appear to be differing proportions of certain IIM subtypes, autoantibody profiles, clinical features and management.**Grant Support:** This project was supported by the Centre of Research Excellence in Pulmonary Fibrosis which is funded by the NHMRC (GNT1116371 and GNT2015613), Lung Foundation Australia, Boehringer Ingelheim, and anonymous philanthropy.***Key Words:*** *idiopathic inflammatory myopathy, interstitial lung disease, anti-synthetase syndrome, dermatomyositis, overlap myositis, polymyositis*  |

**Figures:**

***Figure 1.*** *Bar graph showing the distribution of myositis-specific or myositis-associated autoantibodies among AILDR IIM subtypes (Anti-synthetase syndrome (n=114), Dermatomyositis (n=49) and Overlap Myositis (n=52)).*