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| **Incidence of the non-specific pattern using the GLI equations** |
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| **Introduction/Aim:** The non-specific pattern (NSP) of ventilatory impairment is characterised as a reduced FEV1 and FVC, with a preserved FEV1/FVC and a TLC within normal limits. The reported prevalence of NSP has been estimated at between 3.8 – 9.5% of subjects who perform complex lung function tests, when using ECCS and Miller reference equations, respectively. With the release of the 2021 Global Lung Function Initiative (GLI) all-age lung volume reference equations, the aim of this study was to re-calculate the prevalence of the NSP using the ERS/ATS-recommended GLI spirometry and lung volumes reference equations.  **Method:** 1,848 sets of acceptable and repeatable complex lung function tests (50% male, mean (±SD) age 61 (±14) years) performed at an Australian public hospital pulmonary function laboratory between 2015 - 2019 were analysed. Interpretation of the spirometry and lung volumes results were made using GLI, ECCS and Miller reference equations, and the prevalence of NSP calculated for each. Results were analysed using Cochran’s Q test and subsequent McNemar’s tests.  **Results:** There were significant differences in NSP prevalence depending on the reference equations used (*p*<0.001). 10 sets of results (0.5%) met the criteria of the NSP when using GLI spirometry and lung volumes reference equations – significantly lower than the previously reported prevalence. 16 tests (0.9%; *p*=0.24 vs. GLI) and 95 tests (5.1%; *p*<0.001) were interpreted as having an NSP using ECCS and Miller reference equations, respectively.    **Conclusion:** The use of older and possibly less cohesive reference equations may have contributed to an over-estimation of the reported prevalence of the non-specific ventilatory defect, particularly compared to when using the GLI equations.  **Key Words:** reference equations, static lung volumes  **Nomination for New Investigator Award:** N/A  **Grant Support:** N/A |