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| **Pulmonary Arterial Hypertension: Diagnosis and Management in a Regional Centre** |
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| **Introduction/Aim:**  Pulmonary Arterial Hypertension (PAH) is a rare condition affecting between 3 to 30 per million Australians. Its rarity and the difficulty in diagnosis limits clinician familiarity with optimising management. This study evaluates the accuracy of diagnosis and management of PAH at Cairns Hospital in Far North Queensland.  **Methods:**  A total of 23 patients were diagnosed and managed with PAH between 2013 and 2023. The accuracy of PAH diagnosis was assessed by analysing the right heart catheter (RHC) results, supporting investigations and comorbidities. Two thoracic clinic appointments following diagnosis were appraised using the risk stratification and suggested medical therapy from the 2022 European Respiratory Society (ERS) guidelines.  **Results:**  13, 2 and 8 patients had an objective RHC diagnosis of pre-capillary, post-capillary and mixed pulmonary hypertension respectively. Of these, 13 were missing at least one of the supporting diagnostic tests recommended by the ERS: HRCT, V/Q scan or DLCO. 18 patients had significant cardiopulmonary comorbidities. The ERS 3-strata risk assessment method was used to appraise management from the first clinic. Cardiopulmonary exercise testing, cardiac MRI and BNP measurement were frequently omitted and only 43.5% of patients were commenced on appropriate medical therapy. The ERS 4-strata risk assessment method was used in the second clinic. BNP was again omitted in all but one patient and 81.8% of patients had appropriate adjustment of their medical therapy. The inaccuracies in medical management were largely due to inappropriate initiation of dual therapy in patients with cardiopulmonary comorbidities, and a failure to escalate therapy at the second clinic appointment.  **Conclusion:**  10 patients with evidence of post-capillary disease were inappropriately diagnosed as PAH, largely owing to disproportionately high pre-capillary pressures. Subsequent choice of medical therapy was suboptimal, primarily driven by uncertainty in the impact of various cardiopulmonary comorbidities. Ambiguity in the current ERS guidelines requires further clarification to optimize patient care. |