531 COVID-19 and Patients with Congenital Heart Disease: Are the Risk Higher? A Systematic Review

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Introduction: We aimed to determine if patients with CHD are at a higher risk of poor outcomes if they have COVID-19, compared to those without CHD.

Method: A systematic review was executed using the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) guidelines. To identify articles related to COVID-19 and CHD, an extensive literature search was performed on EMBASE, Medline, Scopus and Global Health databases using keywords and MeSH terms.

Results: 12 articles met the inclusion criteria and were included for analysis in this systematic review. Two themes were identified for data extraction: [1] evidence supporting higher risks in CHD patients and [2] evidence against higher risks in CHD patients. After combining the data, there were 99 patients with CHDs out of which 12 required admission to ICU.

Conclusions: This systematic review suggests that CHD may increase the risk of poor outcomes for those with COVID-19, but also highlights the necessity for more research with larger sample sizes in order to make a more justified conclusion, as the majority of papers that were analysed were case series and case reports. Future research should aim to quantify the risks if possible while accounting for various confounding factors such as age and treatment history.

