Pan Canadian CHD surveillance program

May 8th

COVID-19 identified in Pediatric CHD patients in Canada: 4 Cases 0 Hospitalized

Status of Patients 3 Fully Recovered

Demographic Data 1 Infant

Diagnoses of Interest 2 Single ventricle patients

We have also begun surveillance for COVID-19 associated Kawasaki Disease. To date we have not identified any patients in Canada.

As of May 7th, nationwide (Public Health Agency of Canada) 28 pediatric patients have been hospitalized, 2 pediatric patients have been admitted to ICU, 0 pediatric deaths

Brian McCrindle shared the following with site leaders of the International Kawasaki Disease Registry:

"There was virtual mega-forum on Sunday evening by a PICU consortium, with commentary provided by Jane Newburger and Jane Burns. It was very insightful. First, it is not completely clear if there has been an uptick in our usual KD, and it could be that this coronavirus could be an additional trigger for KD in genetic and immunologically susceptible patients. Second, there seems to be a severe systemic multi-system inflammatory syndrome with some overlap of clinical features with KD. Some of the patients are COVID positive, and it appears that the incidence of this has been rising at a 4-week lag of the incidence of COVID infections. Hence, this may be a delayed pathologic immunologic response that becomes manifest after the infection itself may have resolved. It has some differences to KD when compared to Jane Burns database of KD patients and to KD shock syndrome patients: older age, lower lymphocytes, higher CRP, higher neutrophils, lower hemoglobin, lower platelets, lower albumen, higher ferritin, much high BNP, high troponin and high d-dimers, and hence seems to be distinct. A case definition was circulated for this. There is some evidence for coronary artery involvement, although the observation is still early, and the natural history not yet evolved. There is some evidence for treatment response to our KD anti-inflammatory armamentarium. It is unknown if COVID infected patients with no or mild symptoms also are at risk for coronary artery abnormalities (likely not), and I don't think anyone is recommending echos at this time for these patients." The International KD Registry is beginning to formalize data collection on this entity.