Statistical comparisons were made using Kruskal- Wallis tests for monthly distributions in different years

Conclusion. We observed a significant increase in PFAPA patients referred to our institution soon after introduction of public health measures to slow spread of COVID-19. Given that most children were not in daycare, schools, or camps, we suspect that parents and pediatricians were able to recognize patterns of periodic fevers in children much quicker than preceding years, when fevers would typically be attributed to an infectious process.

Disclosures. **Ravi Jhaveri, MD**, **AstraZeneca** (Consultant)**Dynavax** (Consultant)**Elsevier** (Other Financial or Material Support, Editorial Stipend as Co-editor in Chief, Clinical Therapeutics)**Seqirus** (Consultant)

478. Contemporaneous Evaluation of Kawasaki Disease and Multi-system Inflammatory Syndrome in Children in Northern Virginia

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Session: P-23. COVID-19 Special populations (e.g. pregnant women, children, immunocompromised, etc)

Background. Multi-system inflammatory syndrome in children (MIS-C) can present like Kawasaki disease (KD). After Centers for Disease Control and Prevention guidance was issued in May 2020, we implemented local management strategies emphasizing limited laboratory work up of non-toxic children with suspected MIS-C or KD. We then re-evaluated our management recommendations to ensure appropriate resource utilization for children with MIS-C and KD.

Methods. We identified MIS-C and KD cases via convenience sampling of Pediatric Infectious Diseases records at Inova Fairfax Medical Center from May 1, 2020 to February 28, 2021. Manual chart review extracted clinical points of interest and descriptive statistics compared cohorts. Oral changes included edema, erythema, cracking, or strawberry tongue. Abdominal symptoms included pain, emesis, and diarrhea. Respiratory symptoms included shortness of breath, tachypnea, cough, and need for mechanical ventilation. Musculoskeletal symptoms included pain and edema. Neurological symptoms included headache, dizziness, altered mental status, and irritability.

Results. We identified 8 KD cases and 29 concurrent MIS-C cases. MIS-C cases tended to be older and have presenting abdominal symptoms (median age 8 years old versus 2 years old, $p < 0.01$) and hypotension (20 versus 0, $p < 0.01$), otherwise there was no difference in the frequency of oral changes, rash, conjunctivitis, musculoskeletal symptoms, or neurological symptoms. 7 KD cases and 8 MIS-C cases did not require intensive care. Patients with MIS-C who did not need intensive care still had a lower initial absolute lymphocyte count (ALC) (median 1275/μL, $p < 0.01$), lower initial platelet count (median 217/μL, $p = 0.05$), and higher initial C-reactive protein (CRP) (median 18.3 mg/dL, $p = 0.06$) compared to KD cases; other results were not different between the two cohorts.

Table 1. Characteristics and Findings of KD and MIS-C Cases Not Requiring Intensive Care

	KD Cases (n=7)	MIS-C Cases (n=8)	p-value
Male gender	5	4	0.61
Median age in years (IQR)	2 (0.42-4)	6 (2.5-8)	0.05
Positive SARS-CoV-2 PCR	0	4	0.08
Positive SARS-CoV-2 Antibodies	0	6	0.13
Fever duration at time of evaluation in days (IQR)	5 (4-6)	5.5 (5-6.5)	0.32
Conjunctivitis	6	8	0.47
Rash	6	6	> 0.99
Oral changes	5	4	0.61
Abdominal symptoms	3	5	0.62
Respiratory symptoms	2	0	0.2
Musculoskeletal symptoms	2	3	> 0.99
Neurologic symptoms	1	5	0.12
Median initial WBC count in 10^3/μL (IQR)	11 (9-17)	9.5 (8-10.5)	0.12
Median initial absolute lymphocyte count per μL (IQR)	2860 (2640-3660)	1275 (611.5-1800)	< 0.01
Initial platelet count in 10^3/μL (IQR)	367 (281-579)	216.5 (102-247)	0.05
Initial ALT in U/L (IQR)	36 (15-98)	35.5 (26-103.5)	0.56
Initial albumin in g/dL (IQR)	3.5 (3.3-3.7)	3.3 (2.7-3.8)	0.35
Initial CRP in mg/dL (IQR)	11.2 (5-15.1)	18.3 (13.5-23.8)	0.06
Initial ESR in mm/hr (IQR)	81 (62-97)	53.5 (37-104)	0.39
Initial BNP in pg/mL (IQR)	30	358.3 (86.5-502.5)	0.12
Initial troponin I in ng/mL (IQR)	< 0.1	0.02 (< 0.01 to 0.11)	0.31
Initial ferritin in ng/mL (IQR)	284.29	265.4 (221-1394)	0.83
Initial echocardiogram abnormal	4	5	> 0.99
Coronary artery dilation or prominence	4	4	> 0.99

Conclusion. We observed differences in the initial ALC, platelet count, and CRP between KD and MIS-C cases not requiring intensive care, whereas other labs such as ferritin, troponin, B-natriuretic peptide, and initial echocardiograms did not significantly differ between the two cohorts. Thus, our diagnostic management recommending limited laboratory evaluation for non-toxic patients with suspected KD or MIS-C is reasonable.

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479. Real-world Evaluation of SARS-CoV-2 Monoclonal Antibodies in Solid Organ Transplant Recipients

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Session: P-23. COVID-19 Special populations (e.g. pregnant women, children, immunocompromised, etc)

Background. Patients with COVID-19 infection at highest risk for poor outcomes include immunocompromised patients, such as solid organ transplant (SOT) recipients. Monoclonal antibody (mAb) infusions were developed to promote passive immunity. Analysis of the first 200 patients who received SARS-CoV-2 mAb at our hospital showed a 27 % absolute reduction in hospitalization and emergency department (ED) visits. Understanding the role of SARS-CoV-2 mAb therapy in management of the SOT population is likely to inform decision making for these patients.

Methods. We conducted a retrospective chart review of SOT patients diagnosed with COVID-19 who received mAb therapy between 11/18/20 and 04/26/21. Patients were excluded if they were < 18 years of age or if they weighed < 40 kg. We compared those patients who were hospitalized or visited the ED within 29 days of mAb therapy to those who recovered without further visits to our hospital. AQ15

Results. A total of 50 SOT patients receiving mAb therapy were included in this analysis. Bamlanivimab was given to 33 patients, while 9 patients received bamlanivimab/etesevimab and 8 patients received casirivimab/imdevimab. Twelve (24 %) patients were hospitalized or visited the ED within 29 days of mAb therapy; 38 patients did not. These 2 groups did not significantly differ by age, gender, body mass index, time from SOT, or other risk factors for severe COVID-19 illness per FDA Emergency Use Authorization guidance. Both groups were primarily made up of kidney transplant recipients (66.7 % and 68.4 %, respectively). Significantly more patients in the hospitalization/ED group were receiving antimetabolites as part of their immunosuppression (IS) regimen prior to COVID-19 diagnosis (100 % vs 68.4 %, $p = 0.047$). Patients in the hospitalization/ED group received mAbs within a median of 6 days (IQR 3.8) of symptom onset compared to 4 days (IQR 4) ($p = 0.006$).

Conclusion. SOT recipients were more likely to be hospitalized or visit the ED due to COVID-19 after mAb if they were receiving antimetabolite IS or received mAb later after symptom onset. These data stress the importance of early mAb administration in all SOT patients, particularly in those on antimetabolite therapy.

Disclosures. **Lyndsey Bowman, PharmD**, **Veloxis Pharmaceuticals** (Advisor or Review Panel member, Speaker's Bureau) **Kami Kim, MD**, **Regeneron Pharmaceuticals Inc.** (Scientific Research Study Investigator)**Sanford Guide** (Other Financial or Material Support, Editorial Board Member)

480. Alternate Diagnoses in Children Evaluated for Multisystem Inflammatory Syndrome in Children (MIS-C)

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Session: P-23. COVID-19 Special populations (e.g. pregnant women, children, immunocompromised, etc)

Background. SARS-CoV-2 infection is typically a mild illness in children. Multisystem inflammatory syndrome in children (MIS-C) is a rare, post-infectious, hyperinflammatory condition associated with SARS-CoV-2 infection. The presentation of MIS-C is nonspecific and diagnostic criteria is broad. The Centers for Disease Control (CDC) defines MIS-C as a hospitalized patient < 21 years presenting with fever, laboratory evidence of inflammation, no alternative plausible diagnosis, and with positive exposure history or testing for current or recent SARS-CoV-2 infection. Since there is no single diagnostic test for MIS-C, there are other disease processes that can mimic its presentation and delay prompt diagnosis and management.

Methods. Between March 2020 and February 2021, we reviewed 282 charts of patients admitted for evaluation of MIS-C at our institution.

Results. 101 were found to have MIS-C, 45 found to have Kawasaki Disease (KD), and 129 were ruled out. Of the ruled-out group, the most common final diagnoses were viral infection, urinary tract infection, and acute SARS-CoV-2 infection. Other diagnoses included rickettsial infections, pneumonia, rheumatologic conditions, and bloodstream infection. Rhinovirus/enterovirus, adenovirus, Epstein-Barr virus (EBV), and Herpes Simplex Virus (HSV) were the most common viruses other than SARS-CoV-2 identified.

Conclusion. These findings highlight the importance of maintaining a broad differential when evaluating a patient for MIS-C, especially as community seroprevalence rises, making antibody presence less predictive of MIS-C.

Disclosures. **Susan Wu, MD**, **Eli Lilly** (Shareholder)

481. SARS-CoV-2 Infection in Hospitalized Children: An Elevated Body Mass Index is a Marker of Increased Risk of Acute Respiratory Failure

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Session: P-23. COVID-19 Special populations (e.g. pregnant women, children, immunocompromised, etc)

Background. Several risk factors are known to increase the severity of coronavirus disease 2019 (COVID-19) illness in adults, including age and obesity. Specific comorbidities affecting COVID-19 outcomes in children are less well defined.