cause of hospitalization. Logistic regression was performed to identify risk factors for hospitalization and severe disease.

**Results.** A total of 393 cases were reported, including 229 (58.3%) non-hospitalized and 164 (41.7%) hospitalized infants. The most common symptoms included fever (63.4%), runny nose (45.0%), cough (33.1%) and decreased oral intake (24.9%). Significant risk factors for hospitalization included younger age and presence of comorbid conditions (excluding prematurity), as shown in the Table. Among hospitalized infants, 108 (65.9%) were admitted due to COVID-19 related illness, and 52 (31.7%) were admitted for reasons other than COVID-19. A total of 31 (7.9%) infants developed severe or critical disease. Risk factors for severe disease included prematurity and younger age (Table).

| Characteristic | Hospitalized (n=393) | Non-Hospitalized (n=96) | p-value | OR (95% CI) |
|---------------|-----------------------|-------------------------|---------|-------------|
| Age (months)  | 0–1                    | 28 (7.1)                 | 0.001   | 2.64 (0.40-3.01) |
| Comorbidities | 0–12                   | 58 (14.8)                | 0.002   | 2.83 (1.50-4.73) |

**Discussion.** We describe one of the largest cohort of infants with SARS-CoV-2 infection. Severe disease in this age group is uncommon, with younger age and prematurity significant risk factors for severe COVID-19.

**Conclusion.** We identified early features that differed between patients with MIS-C and those without. Development of a diagnostic prediction model based on these early distinguishing features is currently in progress.

**Disclosures.** Natasha B. Halasa, MD, MPH, Genentech (Other Financial or Material Support, I receive an honorarium for lectures - it’s a education grant), Pfizer (Advisor or Review Panel member, I receive an honorarium for lectures - it’s a education grant, supported by genetech)

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**Table 1: Laboratory and Chest X-ray Characteristics of Children with and without MIS-C**

| Characteristic | MIS-C (n=128) | Non-MIS-C (n=209) | p-value |
|---------------|---------------|-------------------|---------|
| Laboratory    |               |                   |         |
| Fever         | 37 (29.0%)    | 148 (71.0%)       | 0.001   |
| Tachycardia   | 115 (90.3%)   | 190 (91.6%)       | 0.717   |
| Rash          | 64 (50.0%)    | 68 (32.5%)        | 0.038   |
| Thrombocytopenia | 45 (35.2%) | 43 (20.7%)        | 0.024   |
| Chest X-ray   |               |                   |         |
| Cardiac failure | 35 (27.3%) | 5 (2.4%)          | 0.001   |
| Pleural effusion | 11 (8.8%) | 1 (0.5%)          | 0.039   |

**Table 2: Demographic and Clinical Signs and Symptoms of Children with and without MIS-C**

| Characteristic | MIS-C (n=128) | Non-MIS-C (n=209) | p-value |
|---------------|---------------|-------------------|---------|
| Age (months)  | 0–1           | 28 (7.1)          | 0.001   |
| Comorbidities | 0–12          | 58 (14.8)         | 0.002   |

**Table 3: Comparison of Laboratory Findings between MIS-C and Non-MIS-C Infants**

| Laboratory Test | MIS-C (n=128) | Non-MIS-C (n=209) | p-value |
|-----------------|---------------|-------------------|---------|
| CRP             | 12 (9.4)      | 2 (1.0)           | 0.001   |
| LDH             | 12 (9.4)      | 2 (1.0)           | 0.001   |
| Ferritin        | 12 (9.4)      | 2 (1.0)           | 0.001   |

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Patients < 18 years of age who had a positive nasopharyngeal poly
tinal symptoms appear less common. This data suggests that screening questions devel-
symptoms are also suggestive of SARS-CoV-2 infection, while fever and gastrointes-
tential contact, no comorbidities, and to present with cough, cold-like
PCR test were also identified. Asymptomatic patients and those without clinical
patients were diagnosed with MIS-C. Of these MIS-C patients, 5 (63%) were male and 3
(38%) were female. 6 of 8 affected patients were black (75%). 50% of MIS-C patients were
infiltrates or opacities, 4 (8%) had abnormal echocardiogram findings, and 1 (2%) had
diagnosis code. Data was extracted from elec-
17% white, 4 % Asian Ind, etc, and 41% others/unknown. Age distribution was as follows:
0-1 yrs, 15% 6-10 yrs, 13% 1-5 yrs, and 6% newborn. Fever (65%) was the most frequent symptom identified, followed by cough (31%), nausea/ vomiting (29%), abdominal pain (19%), shortness of breath (17%), rash (15%), diarreha (11%), headache (7%), and fever (5%). 18 (46%) had chest pain (6%), red eyes (6%), and
10 (21%) had positive chest X-ray findings of lung infiltrates or opacities, 4 (8%) had abnormal echocardiogram findings, and 1 (2%) had abnormal CT chest. 21 of 48 patients had underlying comorbid conditions, with Diabetes and Asthma being the most common. No deaths were reported. 8 of 48 COVID-19 patients were diagnosed with MIS-C. Of these MIS-C patients, 5 (63%) were male and 3 (38%) were female. 6 of 8 affected patients were black (75%). 50% of MIS-C patients were
between 6-10 years. 3 of 8 patients (38%) had abnormal echocardiogram findings.
Conclusion. This review supports clinical findings from other studies and also suggests certain racial ethnicities may be disproportionately impacted, which war-
rants further exploration to determine genetics vs environmental factors that lead to increased predisposition to severe illness.
Disclosures. All Authors: No reported disclosures
486. Characteristics Associated with SARS-CoV-2 Infection in Children
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Session: P-23. COVID-19 Special populations (e.g. pregnant women, children, im-
munocompromised) (IMMUNE SYSTEM) Background. We sought to describe the range of Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) infection in children.
Methods. Patients < 18 years of age who had a positive nasopharyngeal poly-
merase chain reaction (PCR) for SARS-CoV-2 at a single health system in cen-
tral Pennsylvania from 3/19/2020-12/31/2020 were included. Using a random number generator, 150 additional patients < 18 years of age who had a negative PCR test were also identified. Asymptomatic patients and those without clinical data in the electronic medical record were excluded from analysis. Demographic characteristics, symptoms present at the time of testing, and outcomes were com-
pared between PCR-positive and negative patients. Odds ratios were calculated using univariable and multivariable logistic regression models to patients with positive vs. negative PCR tests.
Results. We included 544 patients in analysis, 412 (76%) of which had a positive SARS-CoV-2 PCR. PCR-positive patients were statistically more likely to have a known contact, no comorbidities, and to present with cough, cold-like symptoms, headache, or loss of taste and smell. All patients who presented with loss of taste and smell were PCR positive at time of presentation. Positive patients were statistically less likely to present with fever or emesis than negative patients. Multivariable regression identified increased age, cough, cold symptoms, head-
ache, and non-white race as predictive of PCR positivity. Patients who tested posi-
tive were statistically less likely to be admitted to the hospital and less likely to require respiratory support than negative patients.
Conclusion. Loss of taste and smell is a specific, though uncommon, indicator of SARS-CoV-2 infection in the pediatric population. Headache, cough, and cold-like symptoms are also suggestive of SARS-CoV-2 infection, while fever and gastrointes-
tinal symptoms are less common. This data supports that screening questions devel-
487. Experience with Remdesivir for Treatment of SARS-CoV-2 in Patients with Liver Cirrhosis
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Session: P-23. COVID-19 Special populations (e.g. pregnant women, children, im-
munocompromised, etc) Background. Remdesivir is a nucleotide analogue antiviral that was FDA approved for the treatment of hospitalized patients with coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Remdesivir has been associated with elevations in serum aminotransferase levels but most cases being mild to moderate and reversible upon discontinuation. Although national COVID-19 guidelines and the American Association for the Study of Liver Diseases (AASLD) currently recommend remdesivir for use in hospitalized patients requiring supplemental oxygen, data is limited using remdesivir in patients with chronic liver disease. Here, we describe our experience with remdesivir in patients with liver cirrhosis.
Methods. Patients with liver cirrhosis who received remdesivir were iden-
tified either prospectively or retrospectively by primary or secondary ICD-10 codes indicating liver disease. Data collected included patient demographics, underlying cause of cirrhosis, co-morbidities, Child-Pugh score, laboratory val-
ues (serum aminotransferase levels, serum creatinine) during and following rem-
desivir, adverse reactions attributed to remdesivir, and mortality (in-hospital, 30-day, and 90-day).
Results. A total of 4 patients with underlying liver cirrhosis completed a 5-day course of remdesivir treatment. On admission, Child-Pugh class was A for 1 patient, B for 2 patients and C for 1 patient with alcoholic steatohepat-
itis (NASH), hepatic amyloidosis, and chronic hepatitis B. There were no acute elevations in aminotransferase levels or adverse events attributed to remdesivir therapy. Mortality was high with 50% in-hospital mortality. Of the 2 other patients who sur-
vived to discharge, one was discharged to home hospice and the other was readmitted within 30 days and expired during that admission.
Conclusion. Since there is limited data available using remdesivir in patients with advanced liver disease, we did not identify any safety concerns related to remdesivir in our cirrhotic patients. Mortality was high illustrating the poor outcome of patients with advanced liver disease and COVID-19. Patients with cirrhosis should be offered remdesivir if clinically appropriate.
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488. Comparison of Demographics and Clinical Characteristics of Multisystem Inflammatory Syndrome in Children and Kawasaki Disease
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Session: P-23. COVID-19 Special populations (e.g. pregnant women, children, im-
munocompromised, etc) Background. Multisystem inflammatory syndrome in children (MIS-C) is an illness associated with recent SARS-CoV-2 infection or exposure. Kawasaki disease (KD), a vasculitis with an unknown etiology, has overlapping clinical presentation with MIS-C, making it difficult to clinicians for diagnosis between them. Therefore, we aimed to compare demographic, laboratory, and clinical characteristics between MIS-C and KD in hospitalized children in Nashville, TN.
Methods. We conducted a single-center retrospective chart review for hospital-
ized children under 18 years who met American Heart Association criteria for KD and were treated with intravenous immunoglobulin from May 2000 to December 2019, and children meeting the CDC criteria for MIS-C from July 2020 to May 2021. Data abstraction for patients’ demographics, clinical presentation, laboratory values and im-
aging results was performed. Pearson’s chi-squared test for categorical variables and Wilcoxon rank sum test for continuous variables, with alpha=.05, were used to com-
pare groups.
Results. A total of 603 KD and 52 MIS-C hospitalized patients were included. Children with MIS-C were older than those with KD. A higher frequency of male sex was seen in both groups, with no significant differences in race and ethnicity (Table). MIS-C children frequently presented with symptoms similar to KD (63.5% rash, 55.8% conjunctivitis, 28.9% mucous membrane changes); however, only one MIS-C patient met criteria for complete KD (Figure). Both MIS-C and KD children presented with elevated CRP and ESR, but the median value of CRP in MIS-C children was signifi-
cantly higher (Table). In addition, white cell count was lower in MIS-C children, which is primarily driven by the lower absolute lymphocyte count in this group (0.9 vs 2.7, p: 0.001), and echocardiography was more likely to be abnormal at presentation compared to KD (Table).