We included 544 patients in analysis, 412 (76%) of which had a positive SARS-CoV-2 test. Pediatric patients with liver cirrhosis who received remdesivir were identified. 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 identified 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 values (serum aminotransferase levels, serum creatinine) during and following remdesivir, 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 A was A for 1 patient, B for 2 patients and C for 1 patient. Co-morbidities included diabetes, hypertension, and portal hypertension. All 4 patients had abnormal echocardiogram findings, and 1 (2%) had elevated CRP and ESR, but the median value of CRP in MIS-C children was significantly lower. In addition, white cell count was lower in MIS-C children, which was statistically significant. Of 1 patient with acute respiratory syndrome, chest pain was noted. 28.9% MIS-C patients had mucocutaneous changes; however, only one MIS-C patient had conjunctivitis, 28.9% mucous membrane changes); however, only one MIS-C patient had conjunctivitis, 28.9% mucous membrane changes). No deaths were reported. 8 of 48 COVID-19 patients were identified 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 disproportionally impacted, which warrants further exploration to determine genetics vs. environmental factors that lead to increased predisposition to severe illness.

Disclosures. All Authors: No reported disclosures

488. Comparison of Demographics and Clinical Characteristics of Multisystem Inflammatory Syndrome in Children and Kawasaki Disease

Rana Tah, MD; Ahmad Yanis, MD; Danielle A. Rankin, MPH, CIC; Joseph R. Starnes, MD, MPH; Lauren S. Starnes, MD, MEd; Daniel E. Clark, MD, MPH; David Parra, MD; Anna E. Patrick, MD, PhD; Sophie E. Katz, MD; MPH; Natasha B. Halasa, MD, MPH; Natasha B. Halasa, MD, MPH; Vanderbilt University Medical Center, Nashville, Tennessee; Vanderbilt University Medical Center, Nashville, Tennessee; VUMC, Nashville, Tennessee

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

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 distinguishing 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 hospitalized 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 imaging results was performed. Pearson’s chi-squared test for categorical variables and Wilcoxon rank sum test for continuous variables, with alpha=5%, were used to compare 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 noted 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 patients presented with elevated CRP and ESR, but the median value of CRP in MIS-C children was significantly 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).

487. Experience with Remdesivir for Treatment of SARS-CoV-2 in Patients with Liver Cirrhosis

Patricia Saunders-Hao, PharmD, BCPS AQ-ID®; Sumet Jain, PharmD; Bruce Hirsch, MD; Pranisha Gautam-Goyal, MD; North Shore University Hospital, New York, New York; Long Island Jewish Medical Center, New Hyde Park, New York; Hofstra Northwell School of Medicine, Manhasset, NY; Zucker School of Medicine at Northwell, Manhasset, New York

Session: P-23. COVID-19 Special populations (e.g. pregnant women, children, immunocompromised, 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 identified either prospectively or retrospectively by primary or secondary ICD-10 codes indicating liver disease. Data collected included patient demographics, underlying cause of cirrhosis, comorbidities, Child-Pugh score, laboratory values (serum aminotransferase levels, serum creatinine) during and following remdesivir, 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. Co-morbidities included diabetes, hypertension, and portal hypertension. All 4 patients had abnormal echocardiogram findings, and 1 (2%) had elevated CRP and ESR, but the median value of CRP in MIS-C children was significantly lower. In addition, white cell count was lower in MIS-C children, which was statistically significant. Of 1 patient with acute respiratory syndrome, chest pain was noted. 28.9% MIS-C patients had mucocutaneous changes; however, only one MIS-C patient had conjunctivitis, 28.9% mucous membrane changes). No deaths were reported. 8 of 48 COVID-19 patients were identified 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 disproportionally impacted, which warrants further exploration to determine genetics vs. environmental factors that lead to increased predisposition to severe illness.

Disclosures. All Authors: No reported disclosures
Conclusion. MIS-C and KD present similarly in children; however, age, laboratory and echocardiography findings can help differentiate between them. Different laboratory and imaging findings can help differentiate between Kawasaki Disease and Kawasaki Syndrome. The comparison of Kawasaki criteria between children with Multisystem Inflammatory Syndrome and Kawasaki Disease is shown in the figure.

Disclosures. Natasha B. Halasa, MD, MPH, Genentech

Table. Comparison of Sociodemographic, Clinical, and Laboratory Characteristics among Children with Kawasaki Disease and Multisystem Inflammatory Syndrome in Nashville

| Demographics | KD (603) | MIS-C (52) | p-value |
|--------------|----------|-----------|---------|
| Age - median | 2.8      | 9.9       | <0.001  |
| Sex, male (%)| 64.3     | 57.7      | 0.338   |
| Race (%)     | 0.3      | 0.2       |         |
| Hispanic     | 14.9     | 15.4      | 0.802   |

Kawasaki Criteria

- Met complete Kawasaki criteria (Fever > 24 hours, 5 signs)
- Length of hospital stay - median: 3.0

Table. Comparison of Sociodemographic, Clinical, and Laboratory Characteristics among Children with Kawasaki Disease and Multisystem Inflammatory Syndrome in Nashville

| Demographics | KD (603) | MIS-C (52) | p-value |
|--------------|----------|-----------|---------|
| Age - median | 2.8      | 9.9       | <0.001  |
| Sex, male (%)| 64.3     | 57.7      | 0.338   |
| Race (%)     | 0.3      | 0.2       |         |
| Hispanic     | 14.9     | 15.4      | 0.802   |

Kawasaki Criteria

- Met complete Kawasaki criteria (Fever > 24 hours, 5 signs)
- Length of hospital stay - median: 3.0

Table. Characteristics of pregnant persons screened for SARS-CoV-2 IgG and enrolled in an expanded follow-up - Seattle, WA

| Seroconversion survey | Seroconversion survey | Longitudinal study survey |
|-----------------------|-----------------------|--------------------------|
| KD (27)               | MIS-C (23)            | 52 (28-39)               |
| Age, years            | 32 (26-39)            | 32 (26-39)               |
| Untreated IgG, weeks  | 19 (16-21)            | 19 (16-21)               |
| Treatment and delivery | 280 (260-300)         | 280 (260-300)            |

Conclusion. Nearly half of pregnant people testing SARS-CoV-2 IgG+ reported no known prior SARS-CoV-2 diagnosis or symptoms. SARS-CoV-2 IgG antibody response and durability in pregnancy has implications for maternal and neonatal protection and highlights potential benefits of vaccination in this population.

Disclosures. Sylvia LaCourse, MD, MPH (Grant/Research Support) Alissa Kachikis, MD, MS, GlaxoSmithKline (Consultant) Pfizer (Consultant) Alexander L. Greninger, MD, PhD, Abbott (Grant/Research Support) Gilead (Grant/Research Support) Merck (Research/Grant Support) Janet A. Englund, MD, MastroAzneca (Consultant, Grant/Research Support) GlaxoSmithKline (Research Grant or Support) Meissa Vaccines (Consultant) Pfizer (Research Grant or Support) Sanofi Pasteur (Consultant) Teva Pharmaceuticals (Consultant) Alison Drake, PhD, MPH, Merck (Grant/Research Support)

490. Uptake and Perceptions of COVID-19 Vaccines Among US Pregnant Women

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