in others studies in MCP cases related to ZIKV. Furthermore, our results might be compared with CT brain scan images from MCPs related to other infectious diseases (STORCH positive) that can also lead to central nervous system alterations. It will certainly help differentiating the etiology of MCPs.

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2358. Acute Flaccid Myelitis Among Hospitalized Children in Texas, 2016

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Background. This is a multisite study of cases of acute flaccid myelitis (AFM) in Texas during the year 2016 among 6 children's hospitals. AFM is a newly recognized and poorly understood disease. Information related particularly to pathogenesis, treatment, and recovery are lacking.

Methods. Children age 0-18 years admitted with AFM defined as acute onset limb weakness with spinal cord lesions on MRI primarily involving gray matter during January 1–December 31, 2016, were reviewed. Abstracted information included demographics, presentation, laboratory findings, treatments, and long-term outcomes up to 18 months after onset of weakness (range 3.5–18 months; median 15 months).

Results. 22 patients from 5 hospitals were included. Median age was 4.9 years. Upper extremity involvement was common (77%), with all extremities being involved in 36%. Enterovirus D68 was identified in 3 cases. Other pathogens identified included human parechovirus (n = 2), human herpesvirus 6 (n = 1), non-D68 enterovirus (n = 2), rhinovirus (n = 1). *Mycoplasma pneumoniae* (n = 1), *Bartonella henselae* (n = 1), and influenza B (n = 1). In total, 32% recovered fully in strength and function, and 45% had full recovery of function. 18% remain completely dependent on caregivers. All extremities were involved in 8 patients. 6 had significant residual weakness, ranging from flactidity in one extremity to complete caregiver dependence. One was lost to follow-up after discharge. None of the three patients with Enterovirus D-68 made a full recovery, and all three remain largely dependent on caregivers. Treatments varied, but most commonly included methylprednisolone (n = 14) or intravenous immunoglobulin (IVIG) (n = 13). All cases of full recovery of function (Figure 1). Response to IVIG and steroids was variable; no harm was noted in response to IVIG (Figure 2).

Conclusion. Our findings overall show more promising outcomes than those seen in the 2014 nationwide outbreak of AFM. Specific treatments were not associated with better outcomes. IVIG appeared to be helpful in several cases and, at the very least, was not harmful. Patients with all extremities involved and/or enterovirus D68 appear to have poorer outcomes.



Figure 2. Direct Response Reported Following IVIG and Methylprednisolone



2359. Validation of a Novel Scoring Criteria for Assessing the Severity of Viral Respiratory Infections in Children

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Background. Novel investigative tools (e.g., whole-genome sequencing) help characterize host and viral genetic contributions to disease severity in pediatric viral respiratory infection. However, a validated scoring system for quantifying illness severity is needed to properly contextualize results. Existing scoring systems are outdated, unvalidated and underpowered. We thus developed a scoring system to address these concerns.

Methods. Children hospitalized with viral respiratory infections were prospectively enrolled over 2 years, with 51 clinical variables abstracted from the medical record. 7 variables felt to be most predictive of disease severity and significantly correlated with each other (Spearman correlation coefficient P < 0.001) were included in the scoring system (duration of hospital and ICU stay, oxygen and high flow nasal cannula (HFNC) use and intubation; maximum nasal cannula and HFNC support), and combined into a disease severity index by converting each into an ordinal score and summing over the variables, with each variable sub-divided into 7 levels of exposure (based on equal interval length cutpoints). For a validation comparison, sampling algorithms utilizing a linear model selected a subset of 96 patients whose disease severity would be randomly assessed by 8 pediatricians in blocks of 12, using D-optimality and space filling criteria to protect against non-linearity (severity scored 1 to 10; 80% power for detection of correlation >0.28, two-sided $\alpha = 0.05$). Mixed model regression analyses compared clinician-scored disease severity with the scoring system. Akaike Information criteria (AIC) and coefficients of determination (R^2) ranked severity indices

Results. 445 subjects (56.2% male, median age 1.2 years) were enrolled. Clinician scores of disease severity averaged 6.2 (SD = 2.2, range 1–10). A scoring system using 7 variables with 7 levels of exposure per variable produced the lowest AIC (0.00, $R^2 = 0.70$ for predicting clinician-scored disease severity after adjustment for rater effects) (Figure 1).

Conclusion. A 7-variable scoring system quantifying disease severity in pediatric viral respiratory infections correlates well with clinician assessment, and may advance the study of such infections.

Figure 1: Fitted model: Association of Clinician Score and Severity Scoring System.

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2360. Clinical Outcomes of Clindamycin Use in Skin and Soft-Tissue Infections (SSTIs) in Pediatrics

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Background. Children are commonly affected by skin and soft-tissue infections (SSTIs); however, data are limited on clindamycin as a preferred treatment and whether resistance testing is impactful. This study was done to determine whether empiric clindamycin use leads to a curative clinical outcome with respect to adverse effects and correlating D-Test resistance.

Methods. This retrospective chart review evaluated pediatric patients >18 years of age, who received clindamycin for a SSTI from January to July 2017. The following patient characteristics were collected: patient demographics (age, weight, admitting diagnosis, and past medical history), type of SSTI, need for incision and drainage, antimicrobial(s) administered, antimicrobial sensitivity profile, culture results, and D-Test results. The primary outcomes of the study were days to symptom resolution and overall length of stay (LOS) in the hospital. The secondary outcome was adverse effects of clindamycin and D-Test results.

Results. A total of 32 patients met the inclusion criteria with a mean age 6.9 \pm 5.9 years. Twenty-four (75.0%) patients had cellulitis, seven (21.9%) had abscesses and one (3.1%) patient had both. Thirteen (40.6%) patients had methicillin-resistant *Staphylococcus aureus* (MRSA) isolated, while four (12.5%) had methicillin-sensitive *Staphylococcus aureus* (MRSA) isolated. The overall mean time to symptom resolution occurred at 1.7 \pm 0.7 days with an average LOS of 2.3 \pm 0.7 days. Four (12.5%) patients were clindamycin-resistant and 12 (37.5%) were erythromycin resistant. Seventeen patients (53.1%) had a D-Test done prior to clindamycin use and of those, five (15.6%) were D-Test positive. The mean time to symptom resolution (1.4 \pm 0.9 vs. 1.7 \pm 0.7 days)