Respiratory failure. We aimed to evaluate characteristics of severe respiratory failure associated with WPUVP in children.

**Methods.** We retrospectively reviewed the cases of respiratory tract infection at a tertiary children’s hospital in Tokyo between April 2010 and April 2017. We performed real-time polymerase chain reaction (PCR) for WPUVP using residual extracted nucleic acid. WPUVP was confirmed from respiratory tract samples of pediatric patients concurrently with respiratory failure. We investigated the clinical characteristics of patients positive for WPUVP. Samples positive for WPUVP were evaluated for co-infection with fast-track diagnostic kit (FTD-2); a multiplex PCR capable of detecting 21 respiratory pathogens.

**Results.** WPUVP was detected in 14 among 318 samples obtained from respiratory tract infections. Median age was 34 months old and males were predominant (n = 11, 79%). Underlying disease was found in 11 (79%) cases, including five cases of preterm and immunocompromised patients. The most common clinical diagnosis was pneumonia (n = 13, 93%). Majority of the respiratory samples were endotracheal tube aspirates (n = 11, 79%) and the remaining were nasopharyngeal swabs. Co-infection was found in eight (57%) cases. WPUVP was the only pathogen detected in six cases, including two preterm children and one immunocompromised patient. Nine cases required mechanical ventilation, and two cases required extracorporeal membrane oxygenation (ECMO).

**Conclusion.** WPUVP was detected from children with severe respiratory failure due to pneumonia, independently or concurrently with other pathogens, especially in preterm and immunocompromised patients.

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1048. Clinical Characteristics of Parainfluenza Virus Infection among Healthy Subjects with Influenza-like Illness

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**Friday, October 6, 2017: 12:30 PM**

**Background.** Parainfluenza virus (PIV) is a chief cause of croup. Less is known about the role of PIV in causing influenza-like illness (ILI) among healthy adults and children. We evaluated clinical characteristics of PIV compared with influenza (flu) infection in healthy subjects diagnosed with ILI.

**Methods.** The Acute Respiratory Infection Consortium (ARIC) conducted an observational, longitudinal study of ILI at five US military treatment facilities from 2009 to 2010. This cohort was otherwise healthy adults, PIV infection can lead to complications that are similar to those resulting from seasonal influenza infection. The aim of this study was to compare the morbidity and mortality in older adults ≥ 60 years hospitalized with RSV disease vs. those hospitalized with seasonal influenza.

**Results.** A total of 731 patients with positive results were identified. Influenza A was the most commonly isolated hospital acquired infection (39%). Rates of ICU admission requiring intubation (22.6% vs. 14.6%, P = 0.06) and respiratory infection-related mortality (7.4% vs. 4.8%, P = 0.14) were higher in hospital acquired RVI but did not meet statistical significance. Less than half (45%) of all patients and within 90 days of discharge received antiviral treatment (oseltamivir). Respiratory infection-related mortality was not significantly different between those who were treated and those who were not treated (5.3% vs. 4.6%, P = 0.64).

**Conclusion.** While influenza remains the most common community and hospital acquired respiratory viral infection in infants at our facility, half of infections were attributed to other respiratory viruses and these resulted in similar rates of serious outcomes including ICU admission and mortality.

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1050. Morbidity, and Short- and Intermediate-term Mortality, in Adults ≥ 60 Years Hospitalized with Respiratory Syncytial Virus Infection vs. Seasonal Influenza Virus Infection

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**Background.** There is increasing evidence that respiratory syncytial virus (RSV) infection can cause serious health problems among older adults, whether healthy and community dwelling, or high risk and hospitalization. In older adults, RSV infection can lead to complications that are similar to those resulting from seasonal influenza infection. The aim of this study was to compare the morbidity and mortality in older adults ≥ 60 years hospitalized with RSV disease vs. those hospitalized with seasonal influenza.

**Results.** This cohort study included members of Kaiser Permanente Southern California aged ≥ 60 years who tested positive for RSV or influenza A/B by multiplex RT-PCR in clinical diagnostic testing during January 1, 2011 to June 30, 2015 and were hospitalized. For multiple eligible hospitalizations, only the first RSV hospitalization for the RSV cohort or first influenza A/B hospitalization for the influenza cohort was included. Electronic medical records for each hospitalized individual were used to extract necessary information, including baseline characteristics, symptoms, comorbidities, and outcomes.

**Results.** The study included 664 RSV (mean age 78.5 years, 39.5% male) and 1922 influenza A/B (mean age 77.5 years, 49.7% male) hospitalizations. There were 310 (46.7%) RSV patients and 501 (26.1%) influenza patients with a diagnosis of pneumonia. There were 119 RSV patients (17.9%) vs. 272 (14.2%) influenza patients that were hospitalized with RSV disease vs. those hospitalized with seasonal influenza.

**Conclusion.** RSV infection can lead to complications and severe outcomes that are similar to those of seasonal influenza in older adults. Effective prevention and treatment strategies such as vaccination and antivirals against RSV could potentially reduce the burden of RSV infections in older adults.

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