1767. Incidence of Respiratory Syncytial Virus Infection among Adults Undergoing Hematopoietic Stem Cell Transplantation: A Prospective Study from India
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Background. Respiratory Syncytial Virus (RSV) is an important cause of morbidity and mortality in hematopoietic stem cell transplant (HSCT) recipients; progression from Upper Respiratory Tract Infection (URI) to Lower Respiratory Tract Infection (LRTI) may occur in 30%–40% of transplant recipients with associated high fatality. Data on disease burden due to RSV among adult HSCT recipients is limited with no earlier reports from India.

Methods. We prospectively studied 50 HSCT recipients who underwent hematopoietic stem cell transplantation at our institute from January 2017 onwards. Patients were followed up for a period of 18 months post-transplant, initially during stay in transplant unit and subsequently on out-patient basis and telephonically for any episode of acute respiratory tract infection. Information on symptoms and signs at presentation as well as basic hematological and radiological investigations were collected. Nasal and throat swabs from symptomatic patients were taken in viral transport medium and tested for RSV by real-time RT–PCR. As per institute policy patients had received prophylaxis with acyclovir and itraconazole till day +30 post-transplant.

Results. A total of 68 episodes of acute respiratory tract infection were tested for RSV during the follow-up period (mean ± standard deviation = 12 ± 5 months; 11 patients expired during follow-up period). Of these 21 were URI episodes, 46 were acute bronchitis episodes and 1 was a pneumonia episode. Two episodes tested positive for RSV in two autologous HSCT recipients, both belonging to RSV-B subtype, one from a URI episode on day 163 of HSCT and the other from a pneumonia episode on day 8 after HSCT. Both recovered without specific targeted treatment against RSV. The incidence of RSV infection in post-HSCT adult patients calculated from this study is 4% per year.

Conclusion. There is significant incidence of RSV infection among post-HSCT adults in India. Nevertheless, institution of targeted treatment options depends on weighing the cost and risk against benefit of using them. RSV-B subtype as seen in this study also is less virulent and less likely to lead to LRTI compared with RSV-A. Clinical predictors of poor outcomes can also help to decide upon prophylaxis. Larger studies focusing on preventing progression to LRTI need to be done.

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1768. Dengue Virus Infection in Solid-Organ Transplant Recipients: Case Series and Literature Review
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Background. Dengue fever is the most prevalent arbovirus among humans, its incidence has increased since the re-emergence, and Colombia is a hyperendemic country for this infection. The number of solid-organ transplant (SOT) recipients, at risk of acquiring dengue virus infection, is constantly increasing, and there are few data regarding the clinical course and outcomes of dengue infection among this population. The aim of this study was to describe dengue virus infection in SOT recipients in Cali, Colombia.

Methods. We present a case series of SOT recipients with dengue virus infection, diagnosed by World Health Organization criteria and a positive NS1 and/or IgM dengue antibodies, which were attended at the FVL from 2001 to 2018. Furthermore, we performed a literature review regarding dengue infection in SOT recipients.

Results. A total of 20 patients were included: 17 kidney and 3 liver recipients. The median age was 50.5 years (IQR = 31–63.5), 65% were female. The median time...
from transplant to dengue was 27.6 months (IQR = 3.82–59.12), and 3 patients had the infection in the first month after the transplant. The most common symptoms were fever (95%), myalgia, headache, and abdominal pain. Warning signs were present in 75% of patients, thrombocytopenia and hemorrhagic manifestations were present in 30% and 15%, respectively. 35% of patients were classified as severe dengue, and 45% were managed at the intensive care unit. Regarding laboratory findings, six patients had transaminases elevation more than three times the upper limit and 7 had serum creatinine elevation, which returned to normal levels. All patients were discharged and none of them had alterations in the graft function. To date, there are approximately 180 reported cases of dengue in SOT recipients (Table 2).

**Conclusion.** Dengue represents a threat among SOT recipients. Unlike other reports, all patients in this series had a full recovery after the infection, suggesting that timely and effective management of patients and the access to high complexity services could prevent fatal outcome.

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**1769. The Impact of Checkpoint Inhibitor Immunotherapy on Infections in Lung Cancer Patients**

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**Background.** Immune checkpoint inhibitors (ICI) therapy has ushered cancer treatment into a potentially curative era. However, infectious complications remain largely unquantified and the few studies that described infections associated with ICI had no comparative control groups. We assessed the rate of infections in patients with non-small cell lung cancer (NSCLC) treated with ICI plus conventional chemotherapy (CC) vs. CC alone.

**Methods.** We performed a comparative single-center retrospective cohort study of patients with NSCLC who received de novo treatment with either Pembrolizumab or Nivolumab, and/or Ipilimumab combined with CC including Pemetrexed and Carboplatin vs. patients treated with CC alone between August 2016 and January 2019. We excluded all patients who were switched from CC to ICI or vice-versa. We evaluated patients’ characteristics, treatment modality, immune-related adverse events (irAEs), and outcome. Infections were defined by clinical signs and symptoms, microbiologic documentation, and/or imaging studies.

**Results.** A group of 126 patients who received ICI concurrently with CC were compared with 126 patients who received CC alone (control group). Patients in the ICI group were more likely to have stage IV NSCLC compared with the control group (P < 0.001). Pembrolizumab was most commonly used as a single ICI agent in 107 patients (85%), followed by Nivolumab and Nivolumab as dual therapy (9%). Confirmed infections were identified in 20 (16%) patients in the ICI group and 18 (14%) in the control group (P = 0.7). The control group had a higher rate of multiple infections at different times compared with the ICI group (P = 0.014). However, there was no significant difference in the types of infections (bacterial, fungal or viral) that occurred between the two groups. The irAEs were reported in 14 (11%) patients, 13 of them received corticosteroids with a median duration of 32 days (range, 15–64 days). Out of these patients, three (21%) developed confirmed infections of which two were viral upper respiratory tract infections and one was a bacterial urinary tract infection.

**Conclusion.** Patients with NSCLC treated with the combination of Immune Checkpoint Inhibitors plus Conventional Chemotherapy have comparable risk of developing infections compared with those on Conventional Chemotherapy alone.

**Disclosures.** All authors: No reported disclosures.