Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Final Abstract Number: 49.001
Session: Infectious Diseases Transplant and Immunocompromised Hosts
Date: Sunday, March 4, 2018
Time: 10:15-12:15
Room: Libertador B

Type: Invited Presentation

Parasitic infections in SOT

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Transplantation is increasing throughout the world, at the same time immigration and travel to and from developing countries and tropical areas are bringing new challenges for the management of transplant recipients. Parasitic infections (PI) can have a significant impact on donor and candidate screening, donor allocation and recipients infections and prophylaxis. Independent of where the transplant procedure is done, or the location of donors and recipients at the time of transplant, these infections represent a potential risk in the post-transplant period. Additionally, common parasitic infectious diseases in SOT recipients are frequently underestimated, and remain one of the most understudied groups of diseases with few prospective trials and no randomized studies in this setting. The most relevant diseases in this context will depend on the impact on the recipients outcome and the prevalence of the disease in the general population (e.g. Leishmaniasis, Chagas Disease, Malaria and Strongyloidiasis). It is necessary to discuss the main recommendations for screening donors and candidates aiming to achieve balance between minimizing the risk of disease and improving transplant activity with quality, cost-effectiveness and safety. It should be stressed that screening procedures recommendations should evaluate the epidemiological risk, the strengths and limitations of screening tests, and the rates of transmission or reactivation and consequences of these diseases to the recipient. On the other hand, if transmission or reactivation occurs one should provide adequate management warranting for a better outcome.

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Emerging viral infections in transplantation

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Emerging virus pathogens are defined by newly discovered pathogen or the increase or threatening to increase in incidence of previously known viruses. In this lecture, the most relevant and current emerging and reemerging virus pathogens in the transplantation will be review.

In transplant scenario, an emerging viral infection may also have a broader impact, causing an atypical or more severe presentation in immunocompromised transplant recipients, as well prolonged viremia and virus shedding sometimes, such as Hepatitis E virus.

On the other hand, some of these new viruses identified during the last decades thanks to the new laboratorial techniques are not necessarily related to a disease, even among immunocompromised patients; an example is the newer polyomaviruses, which are not associated with recognized diseases.

Target antiviral therapy is not available for most diseases. Therefore, reduction of the immune suppression, combined with supportive measures, remains the cornerstone of therapy for most of the cases of severe viral infection among transplant patients.

There are also issues regarding prevention of these infections. Although some are vaccine-preventable illnesses, some vaccines are prepared with live-attenuated viruses, such as the yellow fever vaccine, and, therefore, are not recommended for the immunosuppressed patient.

In addition, the epidemic spread of an emerging viral pathogen in the general population may increase the risk of donor derived virus infection, and may cause a negative impact on the transplant activity. Examples of these scenarios are the emergence of West Nile fever in North America or the Chickungunya outbreaks in Italy and Puerto Rico. The prevention strategies, however, should take into account the epidemiologic scenario and need for continuous updated. The strategies may differ among endemic and non-endemic regions. Risk stratification of the potential donor based on clinical data and laboratorial screening may help to mitigate this hazard. Nevertheless, the limitations of the performance of the screening strategy must be considered in order to appropriately balance the mitigation of the risk of donor-transmitted infection and the adverse consequences of organ shortage for patients who are in the waiting list for transplantation.

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Type: Invited Presentation

Viral respiratory infections in BMT - A common cold is not just a cold in transplant recipients

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Community acquired respiratory viruses (CARV) are an important cause of morbidity and mortality among Hematopoietic Stem Cell Transplant recipients (HSCT). Reported incidence of CARV in HSCT varies from 4% on early days of antigen testing to ~40% using PCR based detection. Most commonly detected viruses are Rhinovirus/enterovirus (22-34%), followed by Influenza, Respiratory Syncytial Virus (RSV) and Parainfluenza on similar range. Less frequently, with important morbidity associated are Coronavirus (3-11%), Adenovirus and Human metapneumovirus (HMPV).

Influenza pneumonia have attributable mortality in HSCT ~ 12%. Progression to lower respiratory tract infection (LRTI) can occur in one third of patients. However, perceived less aggressive viruses can progress to LRTI with equally precarious outcomes. For example, RSV have attributable mortality ~ 15%, with some series describing mortality around 80% in untreated patients. Adenovirus disseminated infection has been reported around 50% in small series, with mortality ranging 23%. Associated risk factors for LRTI progression include age greater than 65, lymphope-

nia, neutropenia, unrelated donor and chronic graft versus host disease.

Bacterial coinfection, bronchiolitis obliterans and decline in pulmonary function are complications frequently described after CARV infections. Allograft related shortcomings remained an important area of research.

General preventive measures are recommended to reduce infection related complications. Great example is Influenza vaccination and antiviral prophylaxis in specific scenarios. Immunization for several other CARV remains in development and not commercially available. Impact of contact and respiratory precaution at level of health care has been documented in several studies and should be followed. Other interventions like palivizumab for RSV in adults still lacking enough data and difficult implementation due to cost.

Therapeutic options are narrow given limited antiviral agents approved for the wide range of CARV. Influenza therapy is known to improve outcomes. Ribavirin (RBV) with or without IVIG has reported to beneficial for RSV, PIV and anecdotic reports for HMPV. RBV IV or inhaled (teratogenic and only FDA approved) administration poses a logistic challenge and associated to several side effects. Cidofovir for Adenovirus, ALN-RSV01 (RSV), DAS-181 (PIV), specific T-cell immunity therapies, among others, should accumulate more data to be suited for general use.

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Session: Diagnosis and Management of Difficult to Treat Bacterial Infections
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Room: Libertador C

Type: Invited Presentation

Therapeutic efficacy of antimcrobials in critically ill patients

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At any time, 50% of patients in intensive care units are receiving antibiotics. Source control and early and appropriate antibiotics administration along with other measures are vital interventions for patients with sepsis. Dose optimization is one critical tool that should be use by clinicians to improve outcomes in critically ill patients. Adequate dosing of these patients not only can improve clinical outcomes but also can impact positively in the emergence of bacterial resistance in the unit. Patients with sepsis and systemic inflammatory response (SIR) suffer from hemodynamic changes such as increased cardiac output, reduced peripheral vascular resistance, changes in the volume of distribution, and fluid shifts. In this setting, other systemic changes frequently take place such as hypoalbuminemia, hepatic impairment, and acute modification of renal function (e.g., augmented renal clearance and acute kidney injury). All these physiological adjustments to SIR lead to changing drug concentrations in serum and at the infection site of the antibiotics prescribed for the underlying infection. In this regard, doses of antibiotics usually administered to non-critically ill patients are probably inadequate in most of those patients with sepsis or SIR. Knowing the pharmacokinetics and pharmacodynamics characteristics of each antibiotic is essential to optimize drug treatment in this setting. Individualizing dosing based on patient clinical status and antibiotic properties should be encouraged. Loading dose, continuous infusion of time-dependent antibiotics, therapeutic drug monitoring, and direct administration at the infection site are among the tools that could improve antimicrobial use in critically ill patients. Discussion of optimization options for most commonly used antibiotics in ICU will be presented.

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Type: Oral Presentation

Dermatitis linearis caused by Paederus colombinus in Colombia: A review and case series

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Background: Dermatitis linearis caused by *Paederus* spp is a distinct type of contact dermatitis, characterized by the presence of erythematous and vesicular lesions on exposed areas of the body, which usually follow a linear pattern of distribution. It is caused by toxins contained in the endolymph of *Paederus* beetles, which belong to the class Insecta, order Coleoptera (beetles), family Staphylinidae (rove beetles), subfamily Paederinae, tribe Paederini, subtribe Paederina.

Methods & Materials: We present a series of five selected cases that reflect the clinical and epidemiological spectrum of this clinical entity from a recent outbreak in two departments of Colombia. The aim of the study is also to report the occurrence of the first outbreak ever reported in Colombia. A thorough physical examination was performed obtaining a detailed description of the cutaneous lesions and looking for signs and symptoms of systemic affection. *Paederus* beetles recovered from patient's dwellings were submitted for entomological identification.

Results: Affected patient ages ranged from 32 to 50 years old, with an average of 42 years old and a female predominance. Lesions presented as eczema with latent burn sensation (60%); as erythematous maculopapular lesions (20%) and papular and erythematous lesions (20%). In all cases, lesions were accompanied by burning / stinging sensation (100%) with pruritus (20%). Afterwards the lesions became vesicular and finally squamous (100%) around the fifteenth day of evolution. In Latin America, reports of dermatitis linearis outbreaks are scarce. The present study reports the occurrence of the first confirmed cases in the Atlantic Coast of Colombia, along with a detailed clinical, ento-