European Respiratory Society Annual Congress 2012

Abstract Number: 4268

Publication Number: P2447

Abstract Group: 8.2. Transplantation

Keyword 1: Viruses Keyword 2: Longitudinal study Keyword 3: Transplantation

Title: Incidence of viral infections in patients with lung transplantation

Dr. Pierre-Olivier 25261 Bridevaux pierre-olivier.bridevaux@hcuge.ch MD ¹, Prof. John-David 25262 Aubert john-david.aubert@chuv.ch MD ², Dr. Paola 25263 Soccal paola.soccal@hcuge.ch MD ¹, Prof. Thierry 25264 Rochat thierry.rochat@hcuge.ch MD ¹ and Prof. Laurent 25265 Kaiser laurent.kaiser@hcuge.ch MD ¹. ¹ Pulmonary Division, University Hospitals, Geneva, Switzerland and ² Pulmonary Division, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland .

Body: Lung transplant recipients (LTR) are at risk of respiratory viral infection (VI). Our goal was to characterize clinical factors associated with upper or lower respiratory tract VI, as well as the relation between VI and acute graft rejection (AR) in a cohort of LTR patients. Method LTR patients (n=112) from Lausanne & Geneva University hospitals had systematic nasopharyngeal swabs (NPS) and when indicated bronchoalveolar lavage (BAL) with transbronchial biopsy (N visits=903). We screened 18 distinct respiratory viruses with rt-PCR during: a) seven 6-week investigator-driven screening period (n=570), b) regular (n=124) and c) emergency visits (n=209). Results During follow-up, 172/903 VI (19%) were identified in 68/112 (61%) LTRs with 34/276 infected BAL and VI rate was highest during emergency visits (p<0.01).

Viral infection rates

	Screening periods	Regular visits	Emergency visits
n virus/ visits (%)	82/570 (14%)	19/124 (15%)	71/209 (34%)

Rhinoviruses were most frequent both in NPS (n=85/138, 65%) and BAL (n=20/34, 59%). New symptoms were reported in 73% of VI. AR was not associated with VI nor initiation of AR therapy up to 3 months (both p=0.5). Association wa unchanged when restricted to VI other than rhinovirus. Conclusion Viral infection rate is high among LTR and related to one third of emergency visits. In this study, common viral infection was not associated with acute rejection or initiation of acute rejection therapy within 3 months.