

P1231 ***Pneumocystis jirovecii* pneumonia in solid organ-transplant recipients: a descriptive analysis for the Swiss Transplant Cohort**

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Background: Few contemporary data are available on *Pneumocystis jirovecii* infection (PJI) in solid organ transplant recipients (SOTr).

Materials/methods: Using the Swiss Transplant Cohort Study (STCS) we performed a retrospective observational study to identify all SOTr with PJI between May 2008 and December 2016.

Results: A total of 43 SOTr were diagnosed with PJI at a mean of 1486 days (range: 67–42134; standard deviation, SD: 6362) : earlier in heart (mean: 298 days, range: 67 – 512; SD: 232) and liver (mean: 640 days, range: 71 01653; SD: 629) than kidney (mean: 1829, range: 80 – 42134; SD: 7368) SOTr. Almost half (21/43, 48.8%) cases were diagnosed during the first year post-SOT. None of lung SOTr developed PJI. Twenty-five cases (58.1%) were observed in one transplant center.

Pneumocystis was detected by direct examination in 39 (90.7%) patients: in 34/39 (87.2%) patients with a fungal stain and in 5/39 (12.8%) patients using an immunofluorescent antibody assay. Polymerase chain reaction was used in 11 (25.6%) patients. The beta-D-glucan was not used for the diagnosis of PJI. Ground-glass opacities were present in 31/35 (72.1%) patients with available computed tomography, followed by non-specific infiltrates (N: 18, 41.9%), nodular lesions (N: 11, 25.6%), and pleural effusion (N: 4, 9.3%). The mean absolute lymphocyte count at the time of PJI diagnosis was 824.5 cells/mm³ (SD: 1202). Most patients (37, 86.0%) were treated with trimethoprim/sulfomethoxazole (TMP/SMX) for a mean of 29.6 days (range: 5, 34). Treatment was changed in 14 (32.6%) patients: 11 patients from intravenous to oral TMP/SMX and 3 patients from TMP/SMX to another agent. Corticosteroids were administered in 26/37 (70.3%) patients with available data. Overall mortality was 16.3% (6/43 patients). One (2.3%) patient died within 6 weeks after the diagnosis of PJI. Patients who died were more likely to have received shorter (mean: 16.7 days) treatment courses compared to patients alive at the time of data extraction (mean: 22.6 days; p=0.02).

Conclusions: PJI is a rare complication in SOTr during the PJI-prophylaxis era. Diagnosis is still based on traditional microbiology, while radiographic presentations can be variable.