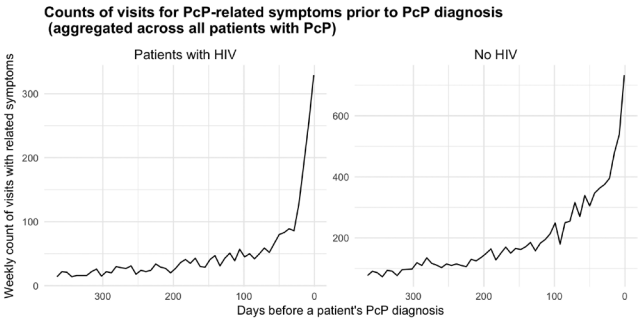
Conclusion. Many opportunities to diagnoses PcP are missed or delayed, especially in outpatient settings. Patients without HIV are at greater risk of experiencing a diagnostic delay, and may experience delays of longer duration.



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

1487. Variability of *Pneumocystis jirovecii* Prophylaxis Use Among Pediatric Solid Organ Transplant Providers

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Session: 148. Respiratory Infections: Miscellaneous
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Background. *Pneumocystis jirovecii* pneumonia (PJP) prophylaxis after pediatric solid-organ transplant (SOT) is routinely recommended, but practice patterns vary.

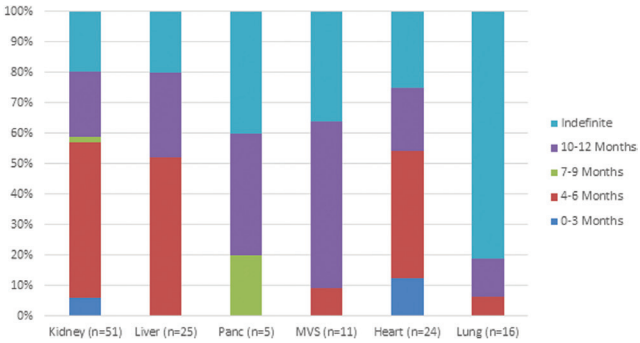
Methods. In 2018, an online survey was sent to 707 members of the International Pediatric Transplant Association.

Results. 105 responded, representing 47 institutions in 18 countries. Majority were transplant physicians (66%) or transplant surgeons (20%). Remainder were nurse practitioners (6%), infectious disease physicians (5%) or pharmacists (4%). Routine PJP prophylaxis was reported by 87%, while 13% do not routinely administer any prophylaxis. The majority not using PJP prophylaxis performed only renal transplants (67%) and listed low incidence of PJP infection as the primary reason (88%). Trimethoprim/sulfamethoxazole (TMP/SMX) was the preferred first-line agent (97%). Common second-line agents were dapsone (33%), inhaled pentamidine (33%), and atovaquone (12%). Of those that provide PJP prophylaxis following renal transplant (n = 51), the majority (51%) provide 4–6 months (Figure 1). Durations following liver transplant (n = 25) were similar; and heart transplant providers (n = 24) most commonly give 4–6 months (42%) as well. Majority of abdominal multivisceral (MVS) providers (55%) give 10–12 months and most lung transplant responders provide lifelong prophylaxis (81%). Across all organs, at least 20% provide lifetime prophylaxis. After completion of PJP prophylaxis, 36% do not restart for any reason and 54% would restart for treatment of acute graft rejection.

Reported PJP infections were uncommon with 80% reporting no PJP cases in the prior 12 months and 15% reporting 1–5 infections. Only 2% reported a case of PJP infection on prophylaxis.

Conclusion. PJP prophylaxis remains routine for the majority of pediatric SOT patients; albeit with notable practice variations. The most common duration of PJP prophylaxis following renal, liver and heart transplant was 4–6 months; while in abdominal multivisceral and lung transplant recipients, durations of either 10–12 months or lifelong prophylaxis were common. There remains a lack of evidence-based guidelines balancing the utility of PJP prevention against potential treatment side effects and unnecessary medication use.

Figure 1: Duration of PJP Prophylaxis.



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

1488. Invasive Pulmonary Aspergillosis in Patients with Solid Tumors: Risk Factors and Predictors of Clinical Outcomes

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Session: 148. Respiratory Infections: Miscellaneous
Friday, October 5, 2018: 12:30 PM

Background. The clinical features and management of invasive pulmonary aspergillosis (IPA) in patients with hematologic malignancies are well known. In contrast, IPA is not well described in solid tumor patients.

Methods. We retrospectively reviewed all *Aspergillus*-positive cultures at MD Anderson Cancer Center from March 2004 to September 2017. We included all adult patients with underlying solid tumor and *Aspergillus*-positive respiratory cultures. The clinical algorithm for IPA diagnosis in critically-ill patients was used to separate colonization from proven or probable infection. We analyzed the association between host factors, clinical findings, and treatment modalities and 12-week overall survival, and response to antifungal therapy.

Results. Out of 1,121 *Aspergillus*-positive cultures, 669 cases did not meet the inclusion criteria and 351 were classified as colonization. We included 101 patients with IPA and solid tumor; 10% proven and 90% probable IPA. The median age was 63 years. The most common underlying solid tumor was lung cancer (51%), 76% of the patients had an underlying lung disease, 47% had received radiation therapy to the chest, and 33% had chronic obstructive pulmonary disease. Neutropenia and diabetes were not common risk factors. Most patients presented with respiratory symptoms (81%). *A. fumigatus* was the most common type isolated (69%). Most common chest imaging findings were nodular (41%) and cavitary lesions (14%); 70% of the patients were treated with voriconazole monotherapy. Independent risk factors for 12-week mortality were receiving steroids within 30 days of IPA diagnosis (hazard ratio 2.2, 95% CI, 1.1–4.6; P = 0.03) and radiation therapy to the chest (hazard ratio 2.6, 95% CI, 1.2–5.5; P = 0.01). In multivariate analysis, a positive calcofluor fungal stain was associated with lower odds of a successful outcome (odds ratio 0.2; 95% CI, 0.05–0.75; P = 0.02) whereas treatment with voriconazole was associated with higher odds (odds ratio 10.1; 95% CI, 2.1–48.5; P < 0.01).

Conclusion. IPA should be considered in solid tumor patients, particularly those with underlying lung disease. Radiation therapy to the chest, steroid intake, and positive fungal stain were associated with poor outcomes, while voriconazole therapy was associated with improved outcomes.

Disclosures. **I. Raad**, The University of Texas MD Anderson Cancer Center: Shareholder, Licensing agreement or royalty. The Unversity of Texas MD Anderson Cancer Center: Shareholder, Dr. Raad is a co-inventor of the Nitroglycerin-Citrate-Ethanol catheter lock solution technology which is owned by the University of Texas MD Anderson Cancer Center (UTMDACC) and has been licensed to Novel Anti-Infective Technologies LLC, in which UTMDACC and Licensing agreement or royalty.

1489. Trends in Antimicrobial Resistance in *N. gonorrhoeae* Isolated in Korea During 2015–2017

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Session: 149. Sexually Transmitted Infections
Friday, October 5, 2018: 12:30 PM

Background. The trends of antimicrobial resistance (AMR) and the molecular epidemiology of gonococcal strains were analyzed in Korean during 2015 to 2017.

Methods. The susceptibility tests of 187 *N. gonorrhoeae* isolates were investigated. The minimum inhibitory concentration (MIC) of *N. gonorrhoeae* isolates were determined by the agar dilution method. Penicillinase-producing *N. gonorrhoeae* (PPNG) and plasmid-mediated tetracycline-resistant *N. gonorrhoeae* (TRNG) were evaluated. Isolates were tested for mutations in *pen*A and also genotyped using *N. gonorrhoeae* multi-antigen sequence typing (NG-MAST) to determine the molecular epidemiological characteristics of the isolates.

Results. The rates of resistance to ceftriaxone (CRO) increased from 6.5% in 2015 to 13.4% in 2017. Azithromycin resistance was documented only in 1.1%, but 53.5% of isolates showed intermediate susceptibility. All isolates were susceptible to spectinomycin. However, none of isolates was susceptible to ciprofloxacin and penicillin (PEN) and 4.3% of isolates were susceptible to tetracycline. The PPNG and TRNG increased from 25.7% and 39.4% in 2015 to 47.8% and 81.5% in 2017, respectively. 74.7% of the extended-spectrum cephalosporins (ESCs)-resistant isolates contained the mosaic PBP2 X allele, which has been previously associated with ESC resistance including treatment failures. *pen*A mosaic alleles X were found in 83.8% of all isolates that harbored decreased susceptibility to cefixime. Among the 16 *N. gonorrhoeae* isolates with decreased susceptibility to CRO, *pen*A mosaic X allele was identified in the