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High-Persensitivity Pneumonitis

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High-Persensitivity Pneumonitis

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Mentor: Daniel Hershberger

Program: Internal Medicine

Type: Case Report

Introduction: Hypersensitivity pneumonitis (HP) is an immune-mediated lung disease characterized by parenchymal inflammation following inhalation of an inciting antigen.

Case Report: A middle-aged woman was admitted with sub-acute respiratory failure. Physical exam revealed a euvolemic woman with coarse breath sounds who was requiring supplemental oxygen. She had two prior hospitalizations for similar but less severe

symptoms. Her previous episodes appeared to respond to antibiotics though required her to go home on oxygen. Chest CT revealed diffuse bilateral consolidations, and a leukocytosis was present. Broad spectrum antibiotics were initiated. There was no clinical improvement at 24 hours so TMP/SMX plus corticosteroids were added to her treatment plan. She promptly improved. A hypersensitivity panel was positive for antibodies against *Aspergillus* species. Exposure history uncovered marijuana use that coincided with her current and prior respiratory symptoms. Hypersensitivity pneumonitis was diagnosed. She was discharged on a steroid taper and strict marijuana avoidance. At six-week follow

up her symptoms had completely resolved. **Discussion:** Environmental fungi are well-established triggers for HP. They are able to pass through lit marijuana cigarettes and pipes, particularly the spores of *A. fumigatus*. Knowing this we felt confident making the diagnosis of HP in our patient because of her positive hypersensitivity panel plus her history of marijuana use coinciding with her symptoms. Her symptoms resolved with corticosteroids and abstinence from marijuana.

Conclusion: Marijuana harbors organic antigens and should be explored as a trigger for hypersensitivity pneumonitis. ■

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Improving the Efficiency of Same-Day Ill Calls

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Type: Original Research

Background: We sought to use quality improvement (QI) methodology to approach problems leading to burnout and workplace stress in our oncology care team.

Methods: Through a broad survey, we identified coordination of same-day, outpatient visits for acutely ill oncology patients as a source of excessive stress for team members across various disciplines including case managers, infusion clinic nurses, advanced practice providers, and

physicians. We used the Plan-Do-Study-Act (PDSA) framework to identify a feasible, appropriate intervention to reduce case manager time required to coordinate visits with the specific aim of reducing their time by 25%. We also tracked phone calls required to arrange a visit and perceived frustration with the process. Our intervention involved transitioning from paging individual practitioners to using HIPPA-compliant group text to collaboratively coordinate care.

Results: After one PDSA cycle, we found case manager time required to arrange a visit had decreased by 21%, number of calls required by 59% and frustration with the process by 41%.

Conclusion: While we did not meet our specific aim, we feel use of a QI approach led to an easily implemented, effective modification to streamline a previously inefficient, disruptive workflow. The use of QI methodology ensured we understood the baseline process and involved all stakeholders before implementing a change and also ensured we followed data to understand our intervention's impact on team members. Viewing sources of burnout and workplace frustration through the lens of QI may lead to more consistently high-yield interventions than traditional wellness-based, administrative approaches. ■

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