September 2019 Arizona Thoracic Society Notes

The September 2019 Arizona Thoracic Society meeting was held on Wednesday, September 18, 2019 at the Banner University Medical Center Phoenix beginning at 6:00PM. There were 16 in attendance representing the pulmonary, critical care, sleep, radiology communities.

An announcement was made that cases of acute lung injury suspected of being secondary to vaping should be reported to Poison Control (1-800-222-1222) or to the State Department of Health (602-364-3587).

There were 3 case presentations:

1. Warren Carll DO, a second-year pulmonary fellow from the Mayo Clinic Arizona, presented a case of a 26-year-old man who complained of a 4-month history of hemoptysis. He had a past medical history of gastroesophageal reflux disease and frequent eye infections. His hemoptysis was up to ½ cup per day and he presented to the Mayo Clinic emergency room when he became frustrated that his outpatient work up was proceeding slowly. Physical examination showed erythematous and injected conjunctiva. His thoracic CT scan showed bilateral ground glass opacities with areas showing a reverse halo sign. Bronchoscopy showed only an increased number of neutrophils on the bronchoalveolar lavage. Laboratory evaluation showed positive cytoplasmic antineutrophil cytoplasmic antibodies (cANCA) at 1:1024 and a proteinase 3 (PR3) of >8U (normal <1). A diagnosis of granulomatosis with polyangiitis (GPA, formerly called Wegener's granulomatosis) was made and the patient responded to corticosteroids and was discharged with a plan for rituximab as an outpatient. Dr. Kevin Leslie discussed the pathology of GPA and pointed out that it is a capillaritis and despite the name well-formed, sarcoid-like granulomas are rarely seen.

2. Kurt Olson MD, a third-year pulmonary fellow at the University of Arizona Phoenix presented a 52-year-old woman who complained of progressive dyspnea and a dry cough for 2 years. She had a past medical history of gastroesophageal reflux disease. Thoracic CT scan showed bronchiectasis with fibrosis most prominent in the lower lungs and an enlarged esophagus. Antinuclear antibodies (ANA) and anti-Scl-70 (also known as antitopoisomerase 1) were both positive. Discussion centered around a recent report in the New England Journal of Medicine showing that nintedanib slowed the rate of decline in the forced vital capacity in scleroderma (1)

3. Dr. Lewis Wesselius presented a 51-year-old immunocompromised host from a heart transplant who presented with a week long history of increasing shortness of breath. His chest X-ray was unremarkable but his SpO2 was found to be decreased. However, a thoracic CT scan showed ground glass opacities with peripheral sparing. Bronchoscopy with bronchoalveolar lavage was negative for infection. His chest x-ray worsened over 3 days and he was treated with high dose corticosteroids, however, he continued to decline. At about this time it was

discovered he had been vaping cannabinoid oil. He gradually improved and his chest x-ray cleared. However, on outpatient follow-up he still had a decreased exercise capacity and his DLco was decreased on pulmonary function testing.

Steve Tseng DO, a third-year fellow at University of Arizona Phoenix, presented a summary of the experience at Banner University Medical Center Phoenix of bronchoscopic lung volume reduction using endobronchial valves. To date they have treated over 50 patients with about 50% showing an improvement in FEV1 of >15% after 3-6 months.

The meeting was adjourned about 8:00PM. The next meeting will be in about 2 months with location and time to be announced.

Reference

1. Distler O, Highland KB, Gahlemann M, *et al.* Nintedanib for systemic sclerosis-associated interstitial lung disease. N Engl J Med. 2019 Jun 27;380(26):2518-28. [CrossRef] [PubMed]