

TB Myositis in a Patient with Dermatomyositis Post Immunosuppression

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55-year-old African female with a history of initially refractory TIF1- γ antibody positive dermatomyositis, with progressive proximal muscle weakness with difficulty swallowing, requiring regular inpatient admissions with the administration of IV steroids and IVIG. The patient was started on immunosuppression with mycophenolate as a steroid sparing agent. The patient slowly improved after initiation



PET scan showing hypermetabolic edema of right pectoralis minor, right thigh and left scapularis muscle consistent with myositis.

of immunosuppression, with a significant reduction in her rash, weakness, and dysphagia. After a few months of therapy, the patient noted pain in the right axilla and proximal right lower extremity with swelling and pain limiting her mobility. There was a concern for underlying malignancy for which PET scan was done, which showed hypermetabolic edema and swelling of musculature involving right thigh, right pectoralis minor and left scapularis consistent with infectious or inflammatory myositis. Concern for focal dermatomyositis was raised and the patient received pulse IV steroids over 5 days with initial improvement. The patient later developed fevers, night sweats and chills, for which the patient was seen in ED. Initial vitals were concerning for sepsis, due to which patient was started on broad-spectrum antibiotics. CT scan of the chest and right lower extremity were done which showed, no pulmonary infiltrates, 5 cm right pectoralis minor and 9.4 cm right gluteus minimus fluid collection consistent with abscess.

Interventional radiology was consulted, and abscesses were aspirated, aspirate from chest wall was positive acid-fast bacilli, concerning for mycobacterium. Cultures were sent to the health department and were noted to be positive for TB. At this time, it was noted that the patient had a prior diagnosis of latent TB when she moved to the United States. The patient was started on Myambutol, Nydravid, Levaquin, Rifampin, and Bactrim.

Tuberculous infections continue to be one of the deadliest infections around the world, with a significantly low incidence rate (2.8/100000) as compared to developing countries. Even with a low incidence rate, there is always a concern for reactivation of latent TB with the initiation of immunosuppression. Tb myositis is one of rare presentation and that can be difficult with diagnosis, especially in a patient who has an underlying autoimmune condition that could have a similar presentation. We recommend getting prior workup to rule out tuberculosis prior to the initiation of immunosuppression.