

Rehabilitation of Debility and Neutropenia with Erosive Lichen Planus Complicated by Acute Foot Pain and Calcium Pyrophosphate Deposition Disease: A Case Report



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INTRODUCTION

A 70 year old female with past medical history of arthritis status post right total hip arthroplasty, diabetes mellitus and hypertension presented to the hospital with 2 week history of nausea, vomiting and mouth sores found to have neutropenia with absolute neutrophil count of 110, biopsy proven erosive lichen plants and E. Coli gastroenteritis.

PATIENT PRESENTATION

The patient with above history was started on neutropenic precautions and treated with piperacillin-tazobactam for her infection with improvement in her neutrophil count. She subsequently developed bilateral foot pain with elevated CRP greater than 200. She was started on methylprednisolone and then transitioned to oral prednisone taper under rheumatology guidance for calcium pyrophosphate deposition disease (CPPD). She was then admitted to inpatient rehabilitation for debility. On admission she required maximum assistance with transfers and was unable to maintain a standing position to ambulate with right leg weakness limited by pain.

MATERIALS/METHODS

As the case report is devoid of patient identifiable information, it is exempt from IRB review requirements as per SUNY Downstate Health Sciences University IRB-01 Policy.

XR FOOT/ANKLE // SURGICAL PATHOLOGY



DX ANKLE LEFT 3 VIEWS, DX FOOT LEFT 3 VIEWS
Clinical Indication: Pain
Technique: 3 views of the left ankle, 3 views of the left foot.
Comparison: None
Findings:
Bones and Joints: The bones are well mineralized. No fractures are present. First MTP joint arthrosis. No evidence of dislocation.
Soft tissues: Soft tissue swelling about the ankle.
IMPRESSION:
Impression:
No acute fracture or dislocation. First MTP joint arthrosis. Soft tissue swelling about the ankle.

Final Diagnosis

Left buccal mucosa - Ulcerated mucosa devoid of surface epithelium with a band like infiltrate of lymphocytes and plasma cells (see comment).
ICD10: L12.1

Comment: The specimen is devoid of surface epithelium suggesting a vesiculo-erosive process, and with clinical confirmation described as mucosal sloughing. There is an association of medications such as Ozempic resulting in clinical, histologic and even immunofluorescence findings of medication associated pemphigoid being identical to non-medication related conventional pemphigoid; a circumstance that may be responsible for the current findings. Submitted clinical photograph was reviewed.

Verified by the Pathologist

REHABILITATION COURSE

Patient was started on intensive inpatient physical and occupational therapies. After completing prednisone course, her left ankle developed severe pain and swelling. Ultrasound examination showed tibiotalar effusion with tophi. Patient was given intra-articular steroid injection and started on multimodal pain management including colchicine, capsaicin cream, gabapentin and oxycodone as needed with resolution of her pain. Patient functionally improved requiring contact guard to minimum assist with transfer, ambulated 60 feet with a rolling walker allowing her to be safely discharged home with home health aide and home PT with outpatient follow up.

CONCLUSION

This case was especially challenging managing a patient with CPPD who experienced a decline while in inpatient rehabilitation. Functional recovery can be severely limited by flares of acute joint pain so early use of multimodal pain management strategies can reduce pain, restore mobility and improve tolerance with therapy. An interdisciplinary approach is crucial for effective pain management and improved quality of life and functional outcomes.

REFERENCES

1. Zhang, W., et al. "EULAR recommendations for calcium pyrophosphate deposition. Part II: management." Annals of the rheumatic diseases 70.4 (2011): 571-575.
2. Abhishek, Abhishek. "SP0008 Management of CPPD disease." Annals of the Rheumatic Diseases 78 (2019): 2-3.