

# Blastomycosis-Like Pyoderma: A mimicker of many sorts

Elise Coberly, BS<sup>1</sup>; Mavra Masood, MD<sup>2</sup>; Arturo Saavedra, MD, PhD, MBA<sup>2</sup>

1. Virginia Commonwealth University School of Medicine  
2. VCU Health, Department of Dermatology



## Introduction

- Blastomycosis-like pyoderma is a rare, exaggerated inflammatory response to bacterial infection that predominately occurs in immunocompromised patients.
- Histology is characterized by pseudoepitheliomatous hyperplasia and resembles cutaneous blastomycosis.

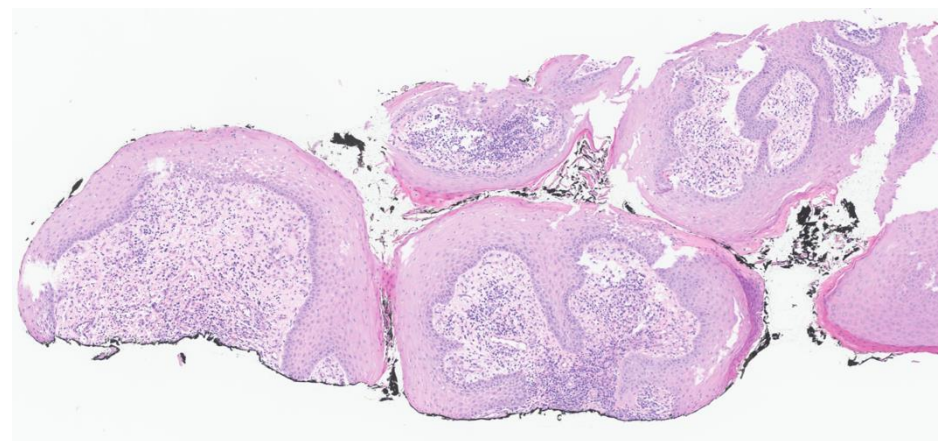
## Case

- A 58-year-old male presented with a 28-year history of chronic verrucous lesions on the left face and right lower trunk. Patient had a history of myelodysplasia, was currently receiving infliximab infusions.
- Examination revealed verrucous, eroded and crusted plaques with associated atrophy affecting the face, chest, right abdomen, and right lower trunk.
- Punch biopsy demonstrated granulation tissue with mixed inflammation with extensive pseudoepitheliomatous hyperplasia (PEH).
- Tissue culture positive for methicillin-sensitive staph aureus. Previous fungal cultures were negative.
- Clinical and histopathological findings were most consistent with Blastomycosis-like pyoderma.
- Patient was started on trimethoprim-sulfamethoxazole, transitioned to oral clindamycin due to hypersensitivity, and topical tacrolimus and mupirocin with improvement.

## Clinical and Histological Findings



**Fig. 1** Verrucous plaque on right lower trunk with crusting prior to treatment



**Fig. 2** Low power H&E demonstrating PEH



**Fig. 3** Verrucous plaque on right lower trunk following 3 months of antibiotic treatment

## Discussion

- Blastomycosis-like pyoderma has clinical and histologic features that may resemble other conditions, especially cutaneous malignancies, making misdiagnosis a significant concern.
- The differential includes cutaneous fungal infection, pyoderma gangrenosum, squamous cell carcinoma, mycobacterial infections, bromoderma, and giant keratoacanthoma.
- Physicians should be aware of BLP in the setting of chronic verrucous plaques with pseudoepitheliomatous hyperplasia on histology in an immunocompromised host.

## References

1. Lee YS, Jung SW, Sim HS, Seo JK, Lee SK. *Blastomycosis-like pyoderma with good response to acitretin*. Ann Dermatol. 2011;23(3):365-368.
2. Su, W. P., Duncan, S. C., & Perry, H. O. (1979). Blastomycosis-like pyoderma. Archives of dermatology, 115(2), 170-173.