

A Case of Interstitial Keratitis in an African American Hidradenitis Suppurativa Patient

India S. Robinson, BA¹; Gabriella Santa Lucia, BS¹; Alex Ritter, BS¹; John Plante, MD, MSCR¹; Manuel Valdebran, MD^{1,2}

¹Department of Dermatology and Dermatologic Surgery, Medical University of South Carolina, Charleston, South Carolina
²Department of Pediatrics, Medical University of South Carolina, Charleston, South Carolina

Medical University of South Carolina, Charleston, SC

Background

Hidradenitis Suppurativa (HS) is a chronic, inflammatory disease resulting in painful abscesses in skin bearing apocrine glands. This disease more often affects women beginning in their second or third decade of life.^{1,2} Interstitial Keratitis (IK) is characterized by nonulcerative and nonsuppurative inflammation of the corneal stroma.³ IK is described as an association that is uncommon in daily clinical practice.^{1,4} Here we describe a patient with a history of Hidradenitis Suppurativa presenting with bilateral interstitial keratitis.

Case Report

A 34-year-old female with a 15-year history of Hurley Stage 3 Hidradenitis suppurativa (HS) with draining sinuses on her left buttock and right axilla presented to the clinic with bilateral eye pain, decreased vision, and redness. Her disease is severe with poor response to typical HS treatments.

Nine months following discontinuation of Adalimumab, the patient presented to an acute care center with a white spot on her right eye with erythema, pain and pruritis that progressed over 10 days to include her left eye. She was prescribed prednisolone drops and showed improvement within a day.

Ophthalmology diagnosed her with bilateral peripheral interstitial keratitis and continued prednisolone eye drops with oral steroids and cyclosporine on reserve. They gathered ANA titers, ANCA, RF, CCP, CMP, CBC, CRP/ESR and syphilis titers. She had an ANA titer of 1:160 with a negative reflex, positive c-ANCA, slightly elevated CRP/ESR, and negative MPO/PR3.

Her keratitis and elevated inflammatory markers were ultimately attributed to severe HS disease resulting in systemic inflammation. They recommended restarting Adalimumab, but she did not due to insurance reasons. Currently, her HS disease is stable without recent flares and her keratitis has resolved.



Figure 1. Patient with bilateral painful, erythematous, painful eyes.



Figure 2. Patient with axillary HS forming nodules and sinus tracts.



Figure 3. Patient with gluteal HS forming nodules and sinus tracts.

Results

Although bilateral interstitial keratitis is a rather rare complication of HS, there are at least 10 cases in which the two entities were linked to one another⁴

One of these case reports is similar to the presentation of another young Black female with severe HS that presented with bilateral interstitial keratitis that initially responded well to topical steroids, as our patient did.⁵ One month following discontinuation of topical steroids, she had a flare of her HS disease that coincided with another flare of keratitis. We also saw a temporal association with the activity of our patient's HS disease and her keratitis. Her keratitis initially presented when her HS disease was flaring and remained stable when her HS symptoms were minimal.

Despite this being a rare phenomenon, it is valuable to be watchful of any HS patients with eye discomfort, pain, change in vision, or change in appearance of the eyes, and consider urgent referral to ophthalmology. Alongside referral, prompt escalation of therapy to systemic immunosuppressive agents is necessary in over 70% of HS cases complicated by inflammatory eye disease and results in significant improvement.^{1,3} Although our patient did not require any systemic therapy, coordination between ophthalmology, rheumatology, and dermatology resulted in the appropriate ruling out of any other autoimmune conditions, and attribution of her keratitis symptoms to her HS disease.

References

1. Alikhan A, Lynch PJ, Eisen DB. Hidradenitis suppurativa: A comprehensive review. *Journal of the American Academy of Dermatology*. 2009;60(4):539-561. doi:10.1016/j.jaad.2008.11.911
2. Jemec GB. Hidradenitis Suppurativa. *The New England journal of medicine*. 2012;366(2):158-164. doi:10.1056/nejmcp1014163
3. Alzaga Fernandez AG, Demirci H, Darnley-Fisch DA, Steen DW. Interstitial keratitis secondary to severe hidradenitis suppurativa: a case report and literature review. *Cornea*. 2010;29(10):1189-1191. doi:10.1097/ICO.0b013e3181d4fd5c
4. Saygin D, Syed AU, Lowder CY, Srivastava S, Maya JJ, Hajj-Ali RA. Characteristics of inflammatory eye disease associated with hidradenitis suppurativa. *European journal of rheumatology*. 2018;5(3):1-168. doi:10.5152/eurjrheum.2018.17163
5. Knox CM, Holsclaw DS. Interstitial keratitis. *International ophthalmology clinics*. 1998;38(4):183-195. doi:10.1097/00004397-199803840-00017