

Peripheral Ulcerative Keratitis in Acquired Immune Deficiency Syndrome - Case Report

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Abstract: *Peripheral ulcerative keratitis as an initial manifestation in acquired immune deficiency is rare. However if not identified and treated can lead to vision threatening problems and other complications. We report such a case of perforated peripheral ulcerative keratitis in a known case of acquired immune deficiency syndrome with good CD4 counts.*

Keywords: peripheral ulcerative keratitis ,acquired immunodeficiency syndrome.

1. Introduction

Peripheral ulcerative keratitis (PUK) is an aggressive, potentially sight-threatening cause for peripheral corneal thinning. It is thought to be the result of immune complex deposition at the limbus, resulting in corneal inflammation and stromal melt ^{1,2}

operatively she was treated with topical antibiotics with steroid regimen along with cycloplegics.

2. Case Report

41year-old female presented with history of pain, redness and diminished vision in both eyes associated with foreign body sensation in LE since 3 days (figure 1) .There was no history of trauma, no history of joint pains. Patient was on Anti retro viral therapy since 5years her CD4 counts in 2017 was 530microl.



Figure 2

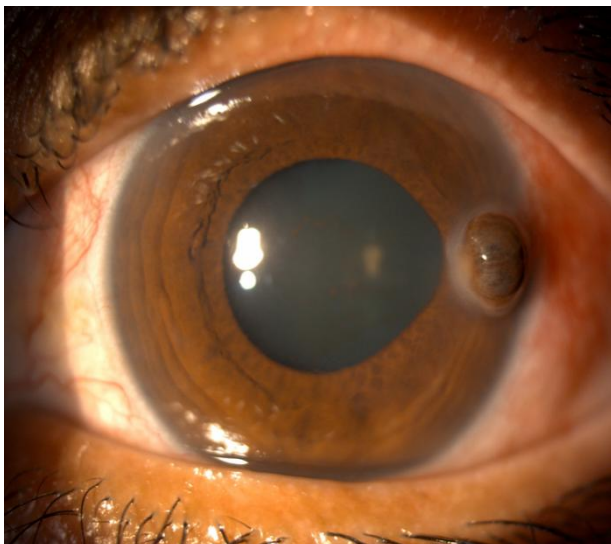


Figure 1

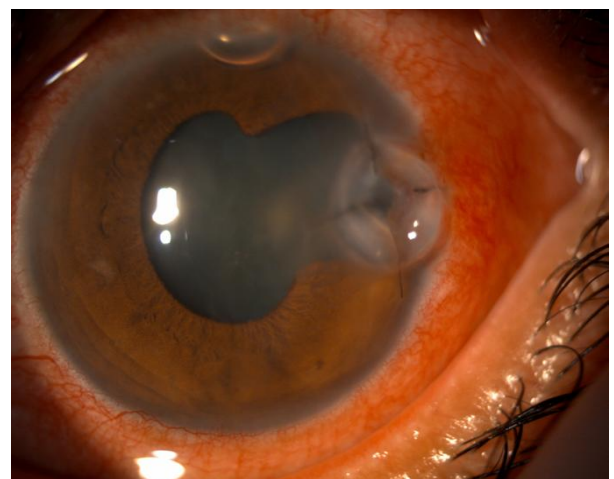


Figure 3: Post operative day 1

Her vision in LE was 6/24 On Slit lamp examination conjunctiva clear with mild congestion temporally, small perforation of 3x3mm with iris tissue prolapse, no infiltrate ,anterior chamber well formed with pigment dispersion on anterior lens capsule seen. Her RE anterior segment (figure 2) was normal Fundus examination BE was normal and was advised for investigations followed by patch graft in LE. Montaux test was negative, Rheumatoid Arthritis factor negative her present CD4 counts were 404microl.post

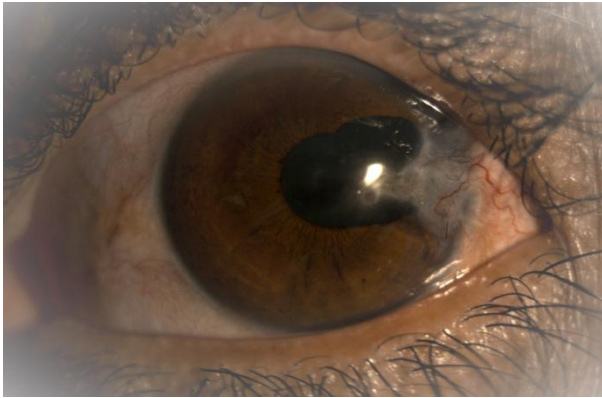


Figure 4: 6 months post operative period

undiagnosed human immunodeficiency virus infection and low CD4 counts Navin D Soni, Avinash B Ingole and Sujit M Murade.

3. Discussion

Any inflammatory stimulus in the peripheral cornea, be it a microbial invasion, immune complex deposition as in systemic immune diseases, malignancy, or trauma, all result in neutrophil recruitment. These neutrophils infiltrate in peripheral cornea to release collagenolytic and proteolytic enzymes as well as many other proinflammatory substances. Therefore, the final result is disruption, dissolution, and tissue necrosis of corneal stroma followed by progressive thinning, a typical feature of PUK.

4. Conclusion

Peripheral ulcerative keratitis can be an initial manifestation of HIV, vasculitis in HIV though uncommon may be an important pathogenic factor that might manifest as organ base disease process⁵. Till date very few cases have been reported in literature regarding the involvement peripheral ulcerative keratitis in HIV. One was herpes zoster PUK in acquired immune deficiency syndrome³. Second reported case was occurrence of both PUK in Right eye and central retinal vein occlusion in Left eye as initial manifestation in HIV⁴. Third case was PUK in undiagnosed HIV with low CD4 counts⁵.

Declaration

No conflict of Interest

References

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