

## A case of herpes simplex keratouveitis diagnosed by real time polymerase chain reaction

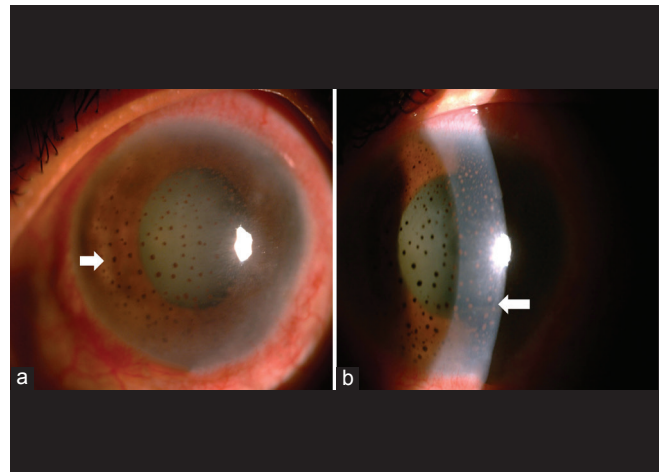
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**Key words:** Herpes simplex, polymerase chain reaction, uveitis

A 59-year-old Asian Indian male presented with complaints of left eye blurring of vision associated with on and off episodes eye pain and redness since last 4 months. On examination, his best corrected visual acuity in the right eye was 6/15, N12 and left eye counting finger at 2 m, <N36. Anterior segment examination of the left eye revealed circumciliary congestion, corneal edema, mutton fat pigmented keratic precipitates, and dilated pupil with complicated cataract [Fig. 1a and b]. Intraocular pressure (IOP) in the right eye was 18 and left eye 48 mmHg. On the basis of history and clinical examination, a probable diagnosis of viral anterior granulomatous keratouveitis was made. The patient was started on topical prednisolone, homatropine, and empirical tablet acyclovir. Patient was also advised tablet. Acetazolamide, topical antiglaucoma medications (timolol and brinzolamide) in left eye to control IOP. Anterior chamber tap was done in left eye for real time polymerase chain reaction (RT-PCR) for herpes simplex virus (HSV). RT-PCR report was positive for HSV [Fig. 2a and b]. The patient was started with T. valacyclovir 1 g 3 times and tapering dose of topical prednisolone. The patient is on follow-up and responding well to the treatment.

### Discussion

Human herpes virus affects various ocular tissues and is known to cause anterior and/or posterior uveitis. Uveitis in HSV ocular disease is usually associated with corneal stromal disease and often unilateral in nature.<sup>[1]</sup> Herpetic anterior uveitis is characterized by keratic precipitates, which can be of several forms such as fine diffuse, granulomatous, and nongranulomatous in appearance. It is often associated with iris atrophy, raised IOP, and dilated pupil in the absence of



**Figure 1:** Anterior segment photograph of the left eye showing large, pigmented keratic precipitates suggestive of granulomatous anterior uveitis in diffuse (white arrow) (a) and slit lamp illumination (white arrow) (b)

dilatation drops.<sup>[2,3]</sup> Secondary glaucoma is also a common complication associated with herpetic uveitis.<sup>[3]</sup> PCR increases specificity and sensitivity of the detection of etiological agent from ocular fluids in a clinically suspected cases of herpetic uveitis and improves outcome of these diseases.<sup>[4-6]</sup> RT-PCR is a quick method for quantitative measurements of the viral load in RT, thus enabling detection of active replication of viruses.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

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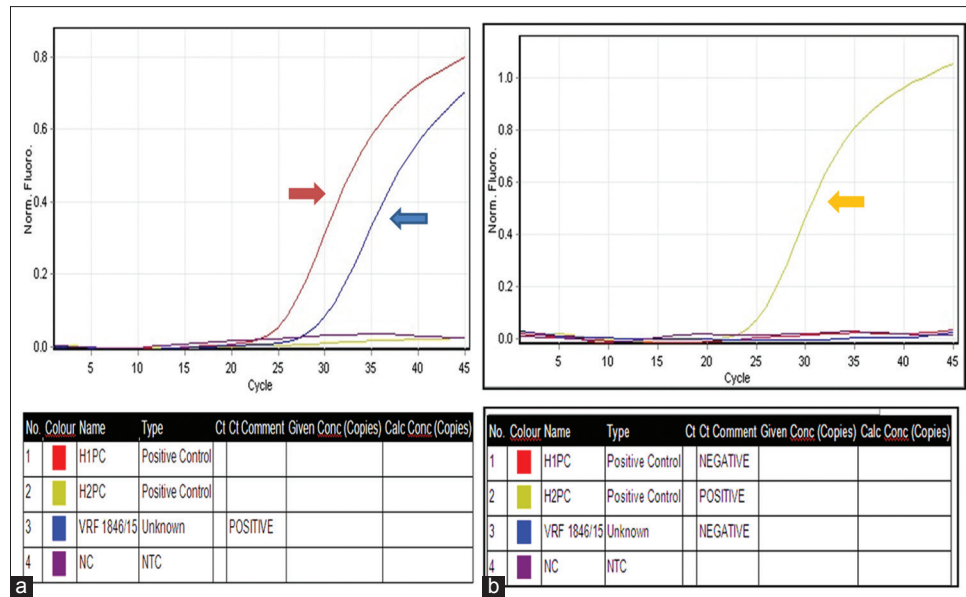
**Cite this article as:** Gondchawar A, Biswas J, Murali S, Eawaran LM. A case of herpes simplex keratouveitis diagnosed by real time polymerase chain reaction. *Indian J Ophthalmol* 2015;63:854-5.

Access this article online	
<b>Quick Response Code:</b>	<b>Website:</b> www.ijo.in
	<b>DOI:</b> 10.4103/0301-4738.171968

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**Manuscript received:** 29.07.15; **Revision accepted:** 12.10.15



**Figure 2:** (a) Real time polymerase chain reaction report showing exponential rise in viral DNA copies suggestive of active replication of herpes simplex I virus (blue arrow) along with positive control (red arrow) and (b) real time polymerase chain reaction report showing exponential rise of positive control only (yellow arrow) and not of herpes simplex II virus

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