

3241 South Michigan Avenue, Chicago, Illinois 60616

### INTRODUCTION

Thygeson's superficial punctate keratopathy is characterized by scattered, discrete intraepithelial lesions that lie close to the visual axis. These corneal opacities stain with sodium fluorescein and are typically bilateral, but asymmetric, in nature. Thygeson's typically affects patients 20 to 30 years of age, and the etiology remains unknown, although viral, bacterial, and immunologic causes have been previously proposed. This case demonstrates an atypical case of Thygeson's: a unilateral presentation affecting a male who is older than the typical demographic age.

## CASE PRESENTATION

A 50-year-old African American male presented to the Illinois Eye Institute complaining of redness and sharp pain of the left eye that began one day prior. He reported a similar occurrence of symptoms in the left eye and right eye, at separate times, 3-4 months prior that improved after his primary care provider prescribed an unknown antibiotic drop. He was a contact lens wearer with poor lens hygiene, sleeping in his colored contacts nightly and replacing every 2-3 months.

### TABLE 1

Entrance testing at initial presentation

	OD	OS
VA	cc: 20/20-	<u>sc</u> : 20/50 <sup>-2</sup> , PH 20/30 <sup>+2</sup>
CVF	FTFC	FTFC
EOMs	FROM	FROM
Pupils	PERRL, (-) APD	PERRL, (-) APD

Upon slit lamp examination, the right eye presented with corneal neovascularization superiorly, from presumed contact lens overwear. The left eye showed 1-2+ diffuse injection with similar cornea neovascularization superiorly. His left cornea also showed many scattered intraepithelial opacities that stained with sodium fluorescein (Figure 1, 2).

#### FIGURE 1 **Optic section of the left cornea at initial**

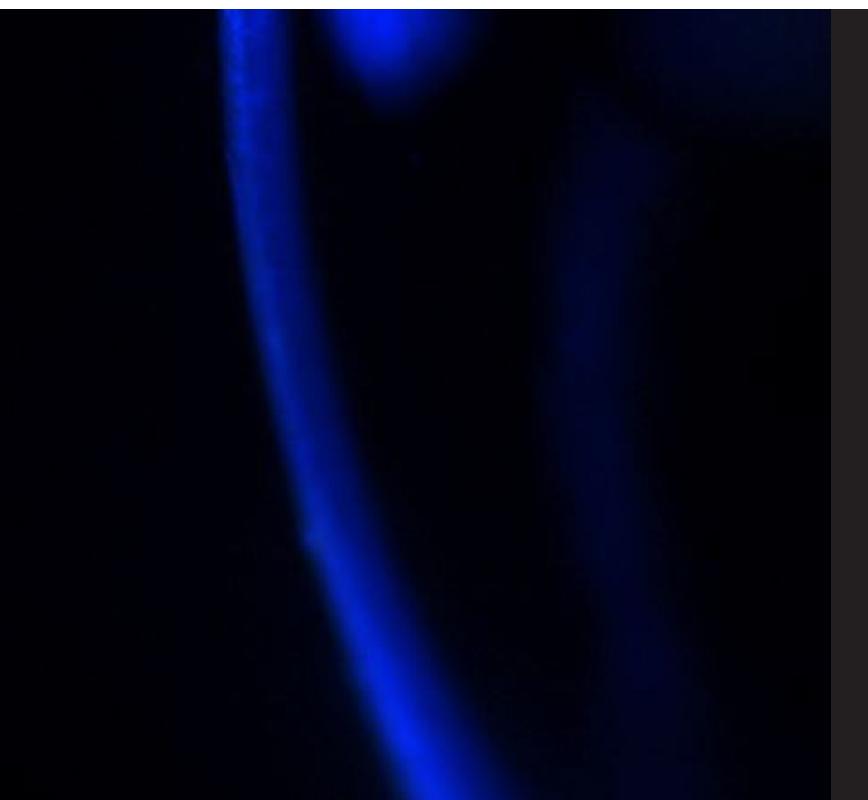
presentation. A) An optic section of one of the intraepithelial opacities using white light. B) An optic section of the same intraepithelial opacity using the cobalt blue filter.



B

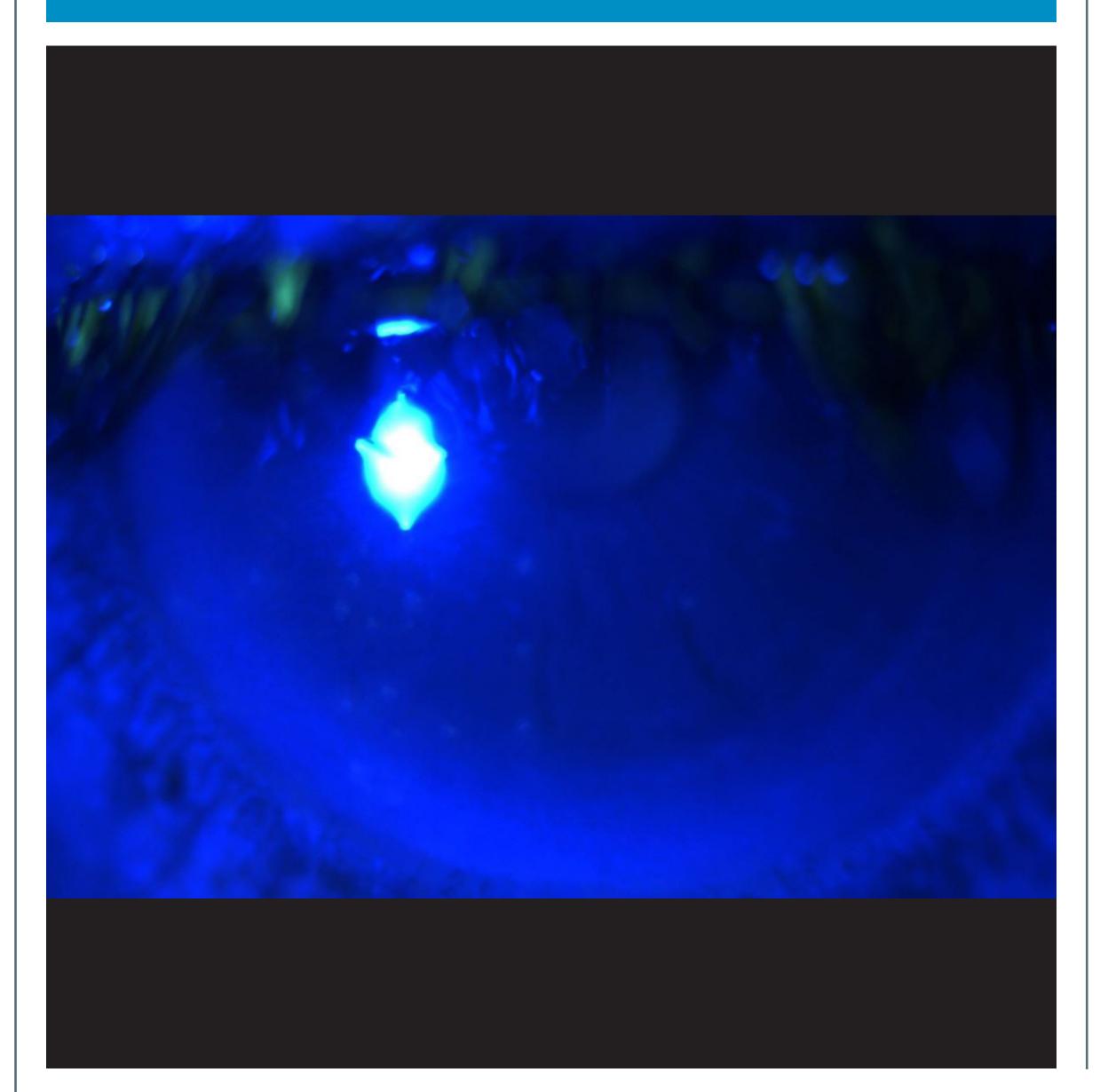
# An Atypical Case of Thygeson's

Alyssa Lancaster, OD • Brittney Brady, OD, FAAO Illinois College of Optometry, Chicago, IL, 60616



### FIGURE 2

Corneal presentation of the left eye at initial visit. The patient's 360 degrees of scattered, intraepithelial opacities can be seen here as grayish lesions under cobalt blue light. These lesions stained positively with sodium fluorescein.

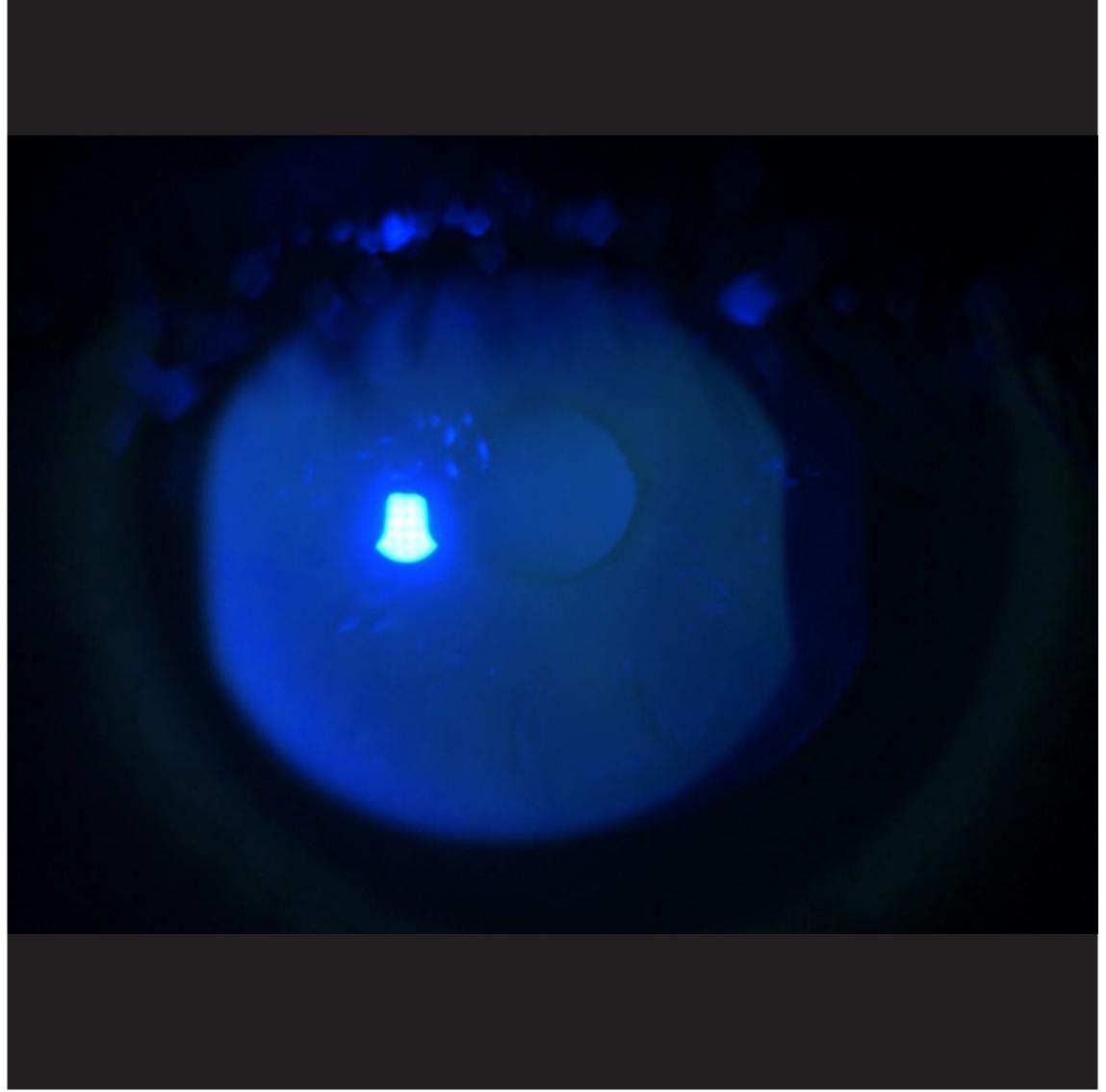


## **TREATMENT AND** MANAGEMENT

After ruling out other causes of keratitis, the patient was diagnosed with Thygeson's superficial punctate keratitis. He was prescribed neomycin-polymyxin b-dexamethasone four times daily into the left eye and was instructed to discontinue all contact lens wear. At six-day follow-up, our patient's symptoms

#### FIGURE 3

Corneal presentation of the left eye at 6-day follow-up using cobalt blue filter. The patient's corneal findings were fully resolved with no stain, and he denied any current symptoms.



were completely resolved (Figure 3), his vision was correctable to 20/20 in the left eye and his intraocular pressure remained within normal limits in both the right and left eye. The patient was educated on the common exacerbations and remissions associated with this condition and on the proper replacement schedule and lens hygiene of his contact lenses. He was told to taper the antibiotic-steroid combination drop to twice a day for 10 days, then stop the medication. The patient completed the tapering of medication without reoccurrence of the condition.

### DISCUSSION

Thygeson's is generally treated with topical steroids during exacerbations of the condition. However, our patient's poor contact lens hygiene was taken into consideration during his treatment, and we decided to treat him with an antibiotic-steroid combination to prevent a secondary bacterial infection due to contact lens overwear.

Other topical treatments for Thygeson's include:

- tacrolimus 0.02% studied at the dosage of twice daily
- trifluridine 1% studied at the dosage of every two hours
- cyclosporin A 2% studied, however, commonly prescribed as Restasis (cyclosporin 0.05%) or Cequa (cyclosporin 0.09%)
- Therapeutic contact lenses for symptomatic relief
- Artificial tears for adequate ocular surface lubrication

### CONCLUSION

Although Thygeson's typically presents as a bilateral condition in younger adults, this case represents a unique unilateral case in a middle-aged male. While it can be helpful to use demographics and typical clinical findings to finalize a diagnosis, our patients do not always present in the "typical" way. Clinicians have used topical steroids as the mainstay of treatment for Thygeson's for decades, but other topical treatments should be considered if a patient is refractory to topical steroids or needing chronic treatment for the condition.

### REFERENCES

Available upon request.

### CONTACT

Alyssa Lancaster, O.D. • alancaster@ico.edu