

NICKEL CONTACT ALLERGY AS A CAUSE OF INTRACTABLE ALLERGIC CONJUNCTIVITIS

Alima Ahmed¹; Neha Gupta, MD²; Robert Swan, MD²

¹Norton College of Medicine, SUNY Upstate Medical University; ²Department of Ophthalmology and Visual Services, SUNY Upstate Medical University



INTRODUCTION

- Allergic conjunctivitis is an IgE hypersensitivity reaction typically seen in patients with known seasonal allergies or other atopic pathology¹.
- Nickel allergy is most commonly seen as contact dermatitis. Presentation of ocular symptoms, such as conjunctivitis, from a nickel allergy is rare².
- Nickel is a very common material found in eyeglasses.
- Herein, we present a case of bilateral severe allergic conjunctivitis secondary to nickel eyeglasses.

CASE PRESENTATION

- A 43-year-old male presented with bilateral recurrent conjunctivitis.
- Exam was notable for bilateral periocular dermatitis, 4+ conjunctival injection, 1+ papillary reaction, diffuse corneal superficial punctate keratitis and no anterior chamber reaction (Figure 1).
- Review of systems was positive for systemic allergies.
- Treatment incomplete response to topical steroid, Ketotifen, Tacrolimus ointment, Lastacaft, and oral Claritin.
- Lab results were notable for elevated IgE level of 465 (normal <100) .
- Patch testing revealed a nickel allergy.
- After transitioning to glasses with less nickel content, the symptoms resolved (Figure 2).

FIGURES

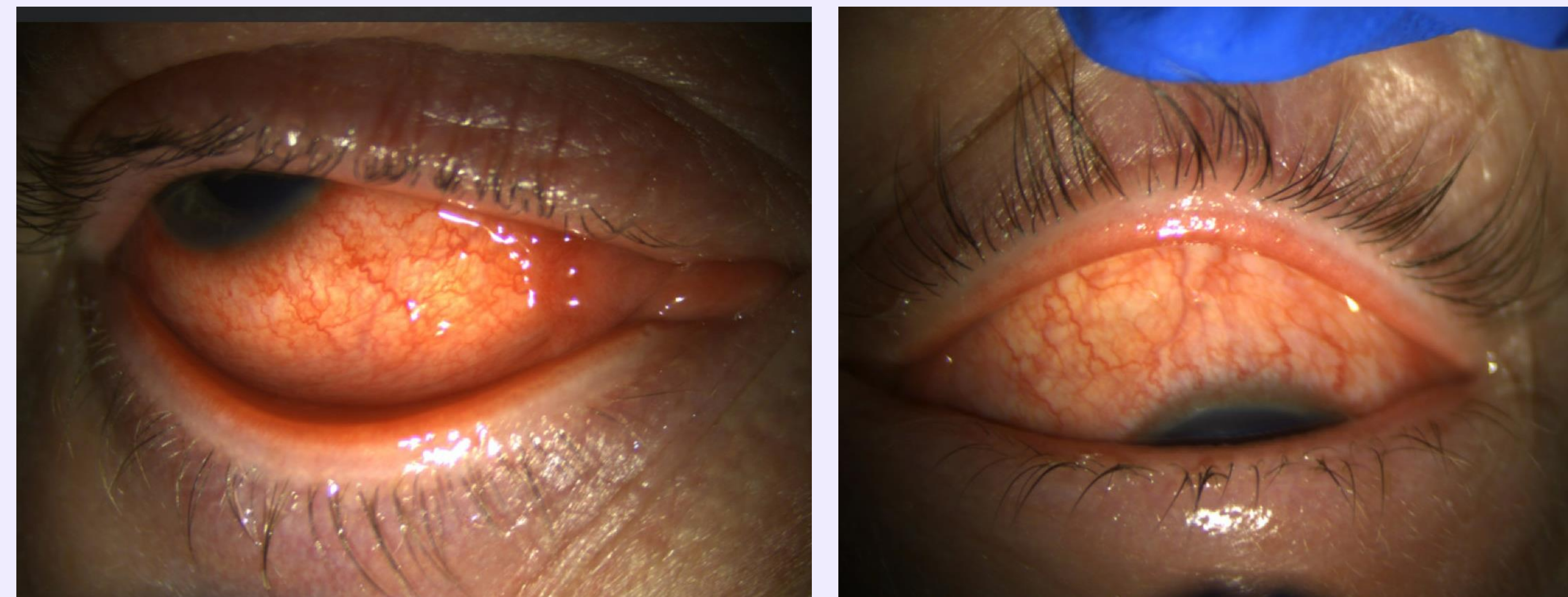


Figure 1: Slit lamp photography demonstrating 360 degrees of 4+ conjunctival injection. Findings representative of both eyes.

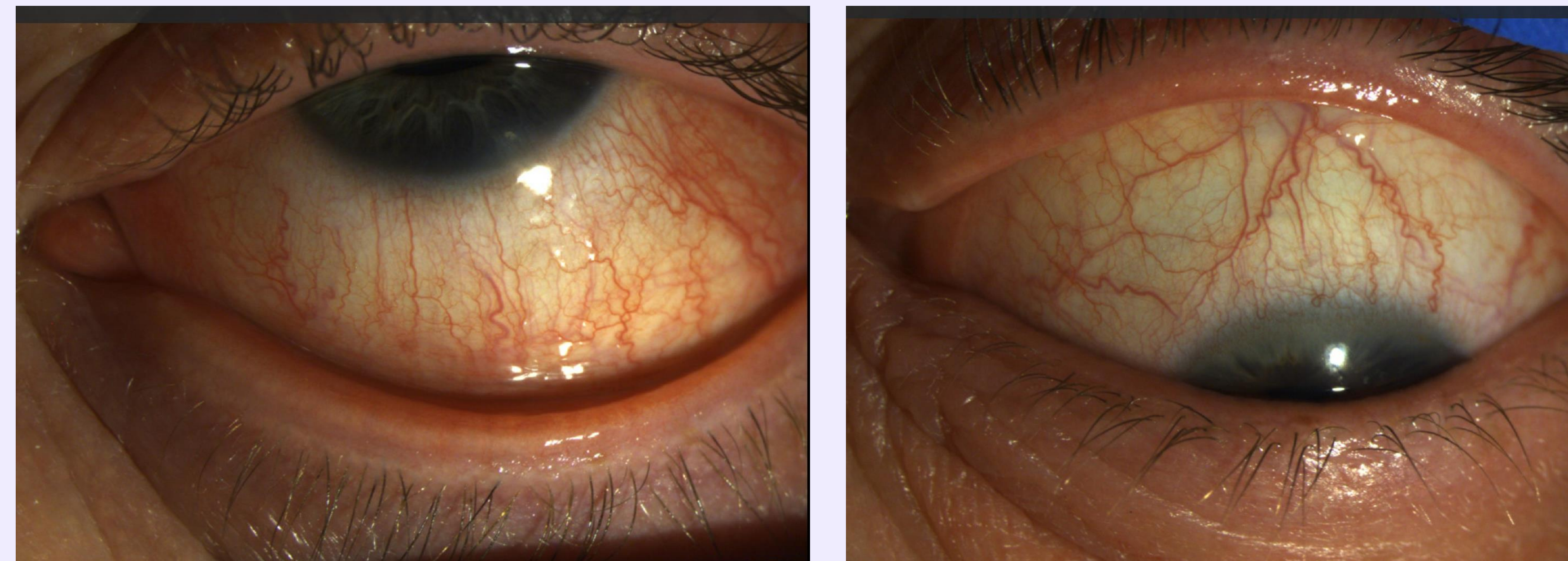


Figure 2: Slit lamp photography demonstrating resolution of the severe allergic conjunctivitis after removal of the nickel allergen, through switching to nickel-free glasses.

DISCUSSION

- Though the patient had been wearing the same glasses for many years, prior to the development of periocular dermatitis and conjunctivitis, removal of this inciting factor resulted in resolution of the allergic conjunctivitis and significant improvement to quality of life.
- Consideration of contact dermatitis to metals should be considered in patients with refractory allergic conjunctivitis and periocular dermatitis.

CONCLUSION

- Nickel allergy has not been established to be clinically relevant in most cases of conjunctivitis.
- Although rare, physicians should be cognizant of nickel induced conjunctivitis, which may present with symptoms of periocular dermatitis and ocular pain.
- Patient remains symptom-free for 9 months since converting all eyeglasses (including occupational protective glasses) to all-plastic.

REFERENCES

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This study was funded in part by unrestricted grants from Research to Prevent Blindness, Inc. New York, New York and Lions District 20-Y1, Syracuse, New York. No other significant financial interests or relationships to disclose

