

literature review; however, this was due to some differences in the measured outcomes of the 2 studies that we would like to highlight.

The primary and secondary outcomes of the authors' (Adam et al.)¹ study was not the presence of suture related keratopathy, but rather subjective patient comfort using specific descriptors for discomfort including foreign body sensation, gritty feeling, and pain from the Ocular Surface Disease Index.² Meanwhile, there is no mention of patient comfort or suture keratopathy in the outcomes of the article from Samimi et al.³ Thus, while Samimi et al. had tremendous outcomes of an absence of suture keratopathy using their modified method, it is entirely possible that those patients still could have had subjective discomfort in the absence of corneal abrasion and could have benefitted from a bandage contact lens in the first week after FS surgery. It cannot be said definitively from their study that the patients did not experience foreign body sensation postoperatively, and that sensation would not have been improved with a bandage contact lens (BCL). Additionally, in the authors' clinical experience performing the FS procedure using both gut and prolene sutures, both groups endorse foreign body sensation in the week postoperatively, despite no objective suture keratopathy.

Since suture keratopathy is still a potential complication of FS surgery given that the original FS technique is still widely performed,⁴ that BCL is used for postoperative comfort in many other ocular surgeries,^{5,6} and the rate of complications of BCL such as microbial keratitis, transient corneal hypoxia, and displacement into the fornix is low,⁷⁻⁹ the authors still believe that using a BCL to increase patient satisfaction and comfort after bilateral FS surgery is of great benefit, and these benefits greatly outweigh the risks of using a BCL, even in the absence of true suture keratopathy.

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Re: “Thyroid Eye Disease Following COVID-19 Vaccine in a Patient With a History Graves’ Disease: A Case Report”

To the Editor:

We would like to share ideas on the publication “Thyroid Eye Disease Following COVID-19 Vaccine in a Patient With a History Graves’ Disease: A Case Report.”¹ Rubinstein noted that “the temporal relationship to her vaccination was likely consistent with autoimmune/inflammatory syndrome associated with adjuvants.”¹ Abnormal thyroid is a possible problem following the coronavirus disease 2019 (COVID-19) vaccination. A clear pathogenesis of the problem is still not conclusive. In many reports, there is no history of prevaccination thyroid status of the patient. In the present report by Rubinstein, it is clear that the patient is a known case of Graves’ disease, and vaccination might be an aggravating factor. Nevertheless, there are no data on abnormal antibody induced by vaccine in this case. It is usually a question whether an exacerbation after the COVID-19 vaccination is a coincidence or not.² Abnormal thyroid function might be laboratory interference³ or an actual pathology. An effect of adjuvant, as proposed by Rubinstein,¹ might be a pathophysiological process. Also, the increased blood viscosity induced by vaccination is also another possible pathophysiological process.⁴ Vaccine can induce significant increase in blood viscosity level,⁴ and a very high blood viscosity is associated with exophthalmos at a stable stage of hyperthyroidism.⁵

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Reply re: “Thyroid Eye Disease Following COVID-19 Vaccine in a Patient With a History Graves’ Disease: A Case Report”

To the Editor:

I appreciate the comments by Drs. Sriwijitalai and Wiwanitkit to the article “Thyroid Eye Disease Following

COVID-19 Vaccine in a Patient With a History Graves' Disease: A Case Report."¹ They note that in the aforementioned article, I suggest a temporal relationship between the patient's coronavirus disease 2019 (COVID-19) vaccine and thyroid eye disease (TED) due to an inflammatory syndrome. I agree that this one case does not in and of itself clinch the exact pathogenesis of this relationship, and indeed it may be coincidental, as I mention in the article.

Among other possibilities that Drs. Sriwijitalai and Wiwanitkit suggest, I believe an inflammatory pathogenesis is the best explanation. First, the patient's thyroid hormone panel was normal, so thyroid hormone abnormality triggering TED is less likely. Second, as indicated in the article, she presented with elevated thyroid stimulating immunoglobulin (TSI), an antibody with high specificity to TED and with a relationship with more severe orbitopathy.² However, it is unknown what the TSI was before the vaccination, as TSI may still be elevated in chronic TED.³ Third, the patient's response to teprotumumab—an insulin-like growth factor 1 receptor blocking antibody—indicates an inflammatory role rather than a hyperviscosity role. The patient had no other signs and symptoms of hyperviscosity systemically, nor such findings on orbital imaging or ophthalmic examination. I do agree, though, that further studies and cases are necessary to elucidate the pathogenesis further.

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Re: "Transient Eyelid Edema Following COVID-19 Vaccination"

To the Editor:

We would like to share ideas on "Transient Eyelid Edema Following COVID-19 Vaccination."¹ Post-COVID-19 vaccination, ocular problem is an interesting clinical issue. Austria et al¹ discussed on possible immunopathological mechanism causing eyelid edema. However, there is no evidence of any abnormal immune laboratory parameters in this patient. In addition to immunity problem, the abnormality might also be explained by other pathobiological process. After COVID-19 vaccination, there might be a hyperviscosity problem.² Ocular edema is a rare but possible clinical presentation of a patient with hyperviscosity, such as a case with underlying myeloma.³ The vaccine-induced hyperviscosity is due to rapid surge on immunoglobulin after vaccine administration, and the viscosity will decrease when time passes.² This might be an explanation for occurrence of transient ocular problem.

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Heterogeneity in Exophthalmometry in Ethiopian Populations and its Clinical Significance

To the Editor:

The authors were impressed by the findings published by Heisel et al.¹ regarding normative exophthalmometry values among 296 Ethiopian adults using the Hertel exophthalmometer, which is, unfortunately, an instrument prone to design flaws. By contrast, the authors contend that the Luedde proptometer would have been safer, easier to use, and noninferior in measuring and monitoring proptosis among these Ethiopian ethnic groups.²

The Hertel proptometer is a relatively bulky and difficult-to-use instrument when compared with the Luedde proptometer. While the Hertel instrument offers the ability to measure proptosis of OU simultaneously, measurements taken viewing the nonilluminated environment of the Hertel mirrors and graticule often produce inaccurate readings.² Further measurement problems arise if the footplates of the device are not positioned at the level of Whitnall's tubercle in a symmetrical fashion on the orbital rims. If patients have hyperglobus or hypoglobus, the Hertel assessment may be rendered invalid.² Cole et al. further discussed the poor reliability of the Hertel instrument in serial measurements.³ This arises because all distance measurements between a patient's 2 lateral orbital rims must be identical to validate subsequent readings.³ The use of the Hertel instrument assumes that the practitioner will use the *preset* interorbital distance of the Hertel placed exactly at the original reference points located at the lateral orbital margins.³ In practice, this interorbital distance is likely to vary substantially between consecutive measurements and between practitioners. This concerning notion is discussed below, in a clinical study carried out recently at Prince of Wales Hospital in Sydney by the Authors, on a small cohort of notionally expert observers.

Additionally, if the anteroposterior distance between the lateral orbital rim and corneal apex is not 20 mm, then parallax error using the mirrors of the Hertel may result in gross measurement inaccuracy when assessing proptosis in OU simultaneously.⁴ In Heisel et al.'s publication, this distance differed markedly from the mean of the study population.¹ Further emphasizing the