

TABLE 1. Hertel measurements of proptosis in a single patient between advanced RANZCO trainees

Candidate	OD	Interorbital distance	OS
1	17	109	19*
2	11*	108	14
3	19	108	19*
4	15	116	17
5	20*	120*	18
6	12	107*	12*
7	14	111	13
8	16	110	15

Columns left to right: Candidate 1–8, OD proptosis, interorbital distance, OS proptosis. Measurements are in mm.

*Indicates minimum and maximum values.

deficiencies of the Hertel, Delmas et al. reported that the Hertel overestimates small values of proptosis and underestimates large values, when compared with CT scan biometry.⁵

The Luedde proptometer has several advantages over the Hertel instrument. The Luedde proptometer is smaller, easier to use, more robust, and cheaper, with much better portability, and ease of storage, and in contrast to the Hertel, does not require specific lighting conditions.² It also offers the advantage of swift and easy sterilization between patients.² These 8 factors should not be overlooked, especially in Ethiopia, where healthcare resources are still developing.

A small, prospective, single-center, nonrandomized, consecutive series was recently conducted on 8 Royal Australian and New Zealand College of Ophthalmologists (RANZCO) Advanced Trainees sitting a practice Objective Structured Clinical Examination, shortly before their final RANZCO fellowship examination. The candidates were asked to identify the presence of, and evaluate the amount of, proptosis in a single patient. For reasons that were unclear, all candidates used the Hertel proptometer. Data on their assessment of proptosis in this patient are documented in Table 1. There was great variability between candidates in the assessed interorbital distance, and startling variability in the measured proptosis. Furthermore, no candidate cleaned the footplates before, or following, its use in assessing the patient's proptosis.

In conclusion, the Authors consider the Luedde proptometer to be substantially superior to the Hertel proptometer. Naturally, in environments where access to medical care is limited, and resources and funds may be scarce, the Luedde proptometer, which is already well-established, should justifiably be the device of choice when evaluating proptosis.

Michael Kvopka, M.D., M.S.
Ezekiel Kingston, B.Med., M.Med.
Thomas P. Toohey, M.D., B.Med.
Tyler R. Blah, B.Biomed.Sci.
Elizabeth L. S. Wong, M.D., B.Med.
Jessica X. L. Li, B.Med.
Michele Y. Fu, B.Med.
Ivy W. Jiang, B.Med.
Ian C. Francis, F.R.A.N.Z.C.O., Ph.D.

Address correspondence and reprint requests to A/Professor Ian C. Francis, FRACS, FRANZCO, PhD, Department of Ophthalmology, Chatswood Eye Specialists, Level 2, 38B Albert Avenue, Chatswood, NSW 2067, Australia. E-mail: ianfrancis@gmail.com

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Angioedema Following COVID-19 Vaccination

To the Editor:

I have read the article by Austria et al. titled “Transient Eyelid Edema Following COVID-19 Vaccination” with great interest.¹ I have a couple of concerns on their description of cases having transient eyelid edema as a pediatric allergist in practice.

First, according to their description, the case with eyelid edema in the figure of the article, it does not look like a true/typical eyelid edema (angioedema) rather a finding of “allergic shiner (dark circles)” of atopic disease such as in patients with allergic rhinitis.^{2,3} Especially, discoloration (hyperpigmentation) around eye makes me think of allergic shiner. Allergic shiners are dark circles especially under the eyes caused by congestion of the nose and sinuses. There are many possible reasons of dark circles under your eyes, but they are called as allergic shiners since allergies are well known for triggering them. Allergic shiners are also sometimes named as “allergic facies” and “periorbital hyperpigmentation.” Therefore, these 3 patients should have been questioned again particularly for allergic symptoms such as sneezing, nasal congestion, and sinus pressure as well as atopic sensitization against house dust mite species (*Dermatophagoides farinae* and *Dermatophagoides pteronyssinus*). Even, these patients should have been tested for allergic sensitizations in the beginning after consultation with allergy clinic. If the authors have better pictures for eyelid edema (angioedema) due to vaccination, they ought to show those ones or put in the article.

Second, as said in the article, they each happened on day 1 or 2 following their first or second dose of the Pfizer-BioNTech COVID-19 vaccine.¹ As expected, if eyelid edema is a type I hypersensitivity reaction, it should happen a couple of hours after the vaccination. However, when the authors try to explain the precise etiology and pathophysiology of these patients' eyelid edema, they describe immuno-complex mechanism (type III hypersensitivity reaction) of Gell-Coombs' classification.⁴ In that case, eyelid edema cannot happen 1 day after the vaccination and will probably take some more time to occur. These pathologic explanations and the patients' clinical picture do not fit with the reality.

Third, I think that this kind of self-limited/resolved adverse effects can raise a possibility to cause general people to avoid/hesitate routine COVID-19 vaccinations.⁵ I think that we

have to be careful about reporting these cases and first consult with allergology.

Öner Özdemir, M.D.

Address correspondence and reprint requests to Öner Özdemir, MD, Division of Allergy and Immunology, Department of Pediatrics, Faculty of Medicine, Sakarya University, Research and Training Hospital of Sakarya University, Adnan Menderes Cad., Sağlık Sok., No: 195, Adapazarı, Sakarya, Turkey. E-mail: ozdemir_oner@hotmail.com. Accepted for publication October 12, 2021.

ORCID: 0000-0002-5338-9561

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