

strive to reverse the trend of self-reported low levels of confidence and address these concern head-on.

The suggestion that ophthalmic photography could negate the need to learn how to perform ophthalmoscopy fails to recognise the acute settings in which this skill is required. A junior doctor on-call overnight in the medical assessment unit assessing a patient with headache is not likely to have access to such photographic equipment, just as a junior doctor examining a patient with breathlessness would not have immediate access to a chest radiograph.

Implementation of simulation training and electronic resources in many medical schools has helped to deliver a more engaging and encompassing curriculum. Support for the validity of fundus simulators is gathering momentum. This is an under utilised teaching tool with the potential to maximise clinical confidence and competence when clinical opportunities may be scarce.<sup>5</sup>

As ophthalmic educators we need to tackle this ongoing educational need at a postgraduate level in addition to undergraduate training so that the next generation of students and physicians are equipped with the skills they need to improve patient outcomes.

#### Conflict of interest

The authors declare no conflict of interest.

#### References

- 1 Yusuf IH, Salmon JF, Patel CK. Direct ophthalmoscopy should be taught to undergraduate medical students—yes. *Eye* 2015; **29**: 987–989.
- 2 Purbrick RMJ, Chong NV. Direct ophthalmoscopy should be taught to undergraduate medical students—no. *Eye* 2015; **29**: 990–991.
- 3 Hill SCL. *Present and Future of the Undergraduate Ophthalmology Curriculum: A Survey of UK Medical Schools*. University of Nottingham: Nottingham, UK, 2015. (MMedSci dissertation).
- 4 The Foundation Programme Curriculum. 2015. Available at <http://www.foundationprogramme.nhs.uk/pages/foundation-doctors/training-and-assessment/fpcurriculum2012> (accessed on 4 September 2015).
- 5 Schulz C, Hodgkins P. Factors associated with confidence in fundoscopy. *Clin Teach* 2014; **11**(6): 431–435.

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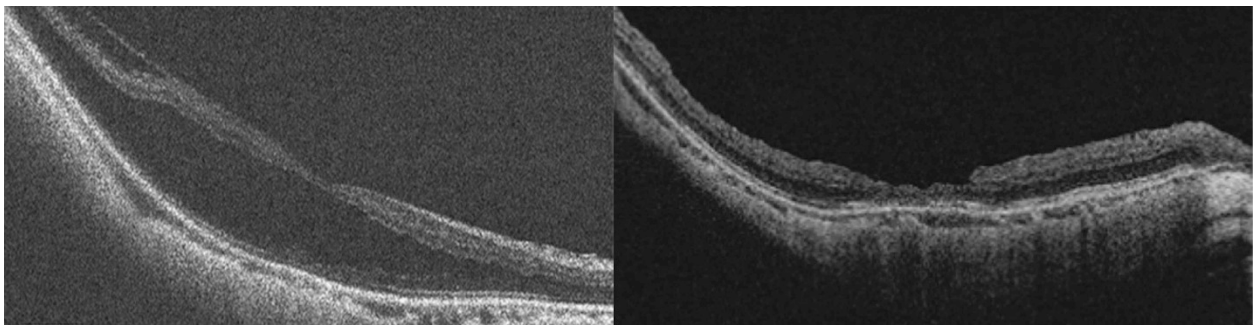
#### Sir, Myopic foveoschisis: an ectatic retinopathy, not a schisis

In their recent article, Gohil *et al* thoroughly review a condition referred to as 'myopic foveoschisis' that is diagnosed in highly myopic eyes.<sup>1</sup> Our letter aims to support the argument that the use of the term 'schisis' for this particular condition, originally coined by Tacano and Kishi in 1999,<sup>2</sup> is inaccurate and misleading and should be abandoned in favor of a more representative term.

According to Merriam Websters the term 'schisis' refers to 'breaking up of attachments or adhesions'.<sup>3</sup> The root of the term is the Greek verb 'σχίζω', which means to cleave, to part, to separate, or to divide.<sup>4</sup>

As stated by the authors, imaging of this condition with spectral domain OCT clearly and consistently demonstrates that the retinal tissues are not cleaved but rather stretched with 'bridges' of neural structural elements spanning between the retinal layers. When the stretching forces are relieved after removal of epiretinal membranes and the internal limiting membrane, the retinal tissue can return to its normal anatomy and function (Figure 1). This is in contrast to other entities defined as schisis, such as juvenile X-linked retinoschisis and long-standing age-related degenerative retinoschisis, in which anatomical restoration is usually not possible.

For reasons probably related to habit, convention, mutual understanding and convenient literature citing, the term 'schisis' continues to be used. However, the use of this term for this specific clinical entity is inaccurate and misleading since it groups this situation together with juvenile and degenerative retinal schisis, diseases with different morphological characteristics and prognosis.



**Figure 1** Case of a patient with 'myopic ectatic retinopathy'. The favorable functional outcome of such cases after vitrectomy supports our argument that the term foveoschisis is not appropriate for the description of this clinical entity. Left: At presentation BCVA was 20/40 and OCT revealed the typical appearance of outer retinal layers stretching. Right: After vitrectomy, OCT revealed normalization of the retinal anatomy with attenuation of stretching. BCVA improved to 20/25.

Other authors have used the term 'myopic traction maculopathy', but in our opinion this name is equally confusing.<sup>5</sup>

We thus propose the term 'myopic ectatic retinopathy' as an appropriate term in order to describe the clinical situation that occurs in some myopic patients leading to stretching of retinal layers at the posterior pole of the eye. We think the proposed term is literally and functionally more accurate, denoting the mechanical background of the situation, while at the same time it is distinct and non-confusing. It can also be included under the broader category of 'traction retinopathies' together with vitreoretinal traction syndrome and tractional retinal detachment.

#### Conflict of interest

The authors declare no conflict of interest.

#### References

- Gohil R, Sivaprasad S, Han LT, Mathew R, Kiouisis G, Yang Y. Myopic foveoschisis: a clinical review. *Eye (Lond)* 2015; **29**(5): 593–601.
- Takano M, Kishi S. Foveal retinoschisis and retinal detachment in severely myopic eyes with posterior staphyloma. *Am J Ophthalmol* 1999; **128**(4): 472–476.
- 'schisis.' *Merriam-Webster.com*. Available at: <http://www.merriam-webster.com> (accessed 27 April 2015).
- George LH, Robert S. *An Intermediate Greek-English Lexicon*. Clarendon Press: Oxford: 1889.
- Panozzo G, Mercanti A. Optical coherence tomography findings in myopic traction maculopathy. *Arch Ophthalmol* 2004; **122**(10): 1455–1460.

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**Sir,**  
**Reply: 'Myopic foveoschisis: an ectatic retinopathy, not a schisis'**

We thank Tsilimbaris *et al*<sup>1</sup> for their comments on the appropriateness of the term 'myopic foveoschisis' to describe the condition that is characterized by the separation of neural retina layers associated with high myopia and posterior staphyloma. They have proposed the term 'myopic ectatic retinopathy' as a more literal and functionally more accurate descriptor of the condition to avoid the use of the word 'schisis', which may be misleading because it is also used to describe other

conditions where there is separation of neural retina layers without the presence of staphyloma.<sup>2</sup>

Using the word 'ectatic' for this condition would imply that we are fairly certain about the pathogenesis and mechanistic factors that underlie its development and progression. However, this is not the case, unfortunately, as our review of the literature has shown. There are several theories ranging from vitreous traction to sclerosing changes of retinal vessels to progression of staphylomas as possible etiological factors. Therefore, it is likely to be multifactorial in nature—hence the success reported with different procedures that address either the vitreous traction factor using vitrectomy, peel plus tamponade or the scleral ectasia factor using posterior buckling techniques.

In the absence of a good understanding of underlying pathogenesis, it is probably best to use purely descriptive names rather than mechanistic terms. The use of descriptive terms, even though similar, do not necessarily cause confusion as long as they are widely accepted as differentiating terminology, for example, postoperative pseudophakic cystoid macular edema (Irvine–Gass syndrome) vs cystoid macular edema associated with posterior uveitis in a phakic patient. The introduction of too many mechanistic or pathogenetic terms in the absence of clear understating of etiology can in fact cause more confusion, for example, serous chorioretinopathy vs central serous retinopathy vs serous choroidopathy. The confinement to broad descriptive terms can enhance communication and reduce confusion without committing to any presumption about etiology until it is better understood. This approach is probably best illustrated by the recent advances in the understanding of mactel<sub>2</sub>, a condition initially described and classified, using descriptive nomenclature, by Don Gass as bilateral, idiopathic acquired juxtafoveal telangiectasis (Group 2A) and as distinctly different from unilateral, congenital parafoveal telangiectasis (Group 1A; Gass,<sup>3</sup> pp 504–506 vs 127–128).

Finally, it is worthy to note that for myopic foveoschisis associated with a staphyloma that is associated with outer layer macular detachment, Don Gass also descriptively included the additional observation (before the advent of OCT) that the retinal profile was concave rather than convex in shape, thereby differentiating it from rhegmatogenous detachments with recruitment of subretinal fluid that is associated with posteriorly located breaks and macular holes in myopic eyes.

#### Conflict of interest

The authors declare no conflict of interest.

#### References

- Tsilimbaris MK, Vavvas DG, Bechrakis NE. Myopic foveoschisis: an ectatic retinopathy, not aschisis. *Eye* 2016; **30**: 328–329.
- Powner MB, Gillies MC, Tretiach M, Scott A, Guymer RH, Hageman GS *et al*. Perifoveal müller cell depletion in a case of macular telangiectasia type 2. *Ophthalmology* 2010; **117**(12): 2407–2416.
- Gass DM. *Stereoscopic Atlas of Macular Diseases: Diagnosis and Treatment*, 4th edn. Mosby-Yearbook: St. Louis, 1997.