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CORRESPONDENCE

Comment on: Managing paediatric giant retinal tears

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The article 'Managing paediatric giant retinal tears' by Raman et al. [1] defines giant retinal tear (GRT) as 'tractional retinal breaks that extend circumferentially to at least three clock hours or more'. This definition could equally apply to a retracted retinal dialysis and fails to differentiate between two varieties of retinal breaks with a fundamentally different pathogenesis and management.

Although the oral disinsertion of a retinal dialysis often exceeds 90 degrees, the vitreous is of normal architecture and characteristically remains attached to the posterior edge of the dialysis and they respond very well to conventional scleral buckling techniques [2, 3]. In contrast, GRTs are characterised by an independent (and usually rapid) mobility of the posterior flap associated with an abnormally anterior separation of the posterior hyaloid membrane. Gravity induced radial extensions may also occur in GRT and an internal approach for repair is almost always required.

Furthermore, in the management of paediatric retinal detachments (especially those associated with GRT), one must consider the possibility of one of the Stickler syndromes—the most common cause of retinal detachment in childhood [3]. There are now known to be at least 11 clinical sub-groups of this disorder [4] and counselling and molecular genetic analysis is important to identify those in the high-risk sub-groups for whom prophylaxis against GRT has been shown to be highly effective [5].

The vitreous phenotype in these inherited vitreoretinopathies is not due to liquefaction as suggested by Raman et al. but to a congenital haplo-insufficiency of type II collagen production in the secondary vitreous. Not only is the type 1 vitreous anomaly pathognomonic of Stickler syndrome, it can also be particularly helpful in aiding clinical diagnosis in the sub-groups where the systemic features are mild or absent [6].

In summary, we wish to highlight the importance of vitreous phenotyping and molecular genetic analysis in all children presenting with GRTs, as the risk of visual loss in the fellow eye in the high-risk groups can be substantially reduced with prophylactic treatment.

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COMPETING INTERESTS

The authors declare no competing interests.

ADDITIONAL INFORMATION

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