

Delayed complications of posterior vitreous detachment are not uncommon

Acute posterior vitreous detachment (PVD) often presents with concurrent complications, but many eyes continue to experience retinal complications within the 6 months after diagnosis, according to this large-scale US study.

Study design

This retrospective observational study analyzed 9635 eyes with acute PVD using a large deidentified database of patient information drawn from 65 vitreoretinal practices in rural, urban, and suburban settings in the United States. The primary outcomes were to identify the rates of vitreous hemorrhage, retinal tears, and retinal detachment at different follow-up points, and to ascertain specific risk factors associated with a higher rate of complication.

Outcomes

The rate of any complication of all eyes was 25%, with most occurring at presentation. However, 25.8% of retinal detachments, 19.2% of retinal breaks, and 8.0% of isolated vitreous hemorrhages occurred within the 6 months following PVD diagnosis. Among eyes that presented with vitreous hemorrhage, 34.6% had concurrent retinal breaks and 9.2% had concurrent retinal detachments; 7.4% developed breaks and 1.3% developed retinal detachments in the 6-month follow-up

period. The risk of any complication was 30.0% in men versus 21.7% in women over the course of the study. In pseudophakic eyes, those who had surgery within 3 months of PVD diagnosis had higher rates of complications at all time points than those who experienced PVD more than 3 months postoperatively. Forty-four percent of eyes with documented lattice or peripheral retinal degeneration were found to have a complication throughout the course of the study. A retinal tear or detachment in the fellow eye also increased the rate of complications in the acute PVD eye.

Limitations

Limitations of this study include its retrospective design as well as its reliance on documentation with potential inconsistencies. In addition, the use of a pooled database limits attainable information due to the lack of accessibility to individual charts. Finally, it is unclear whether follow-up visits were scheduled or acute, which may have affected the data.

Clinical significance

The majority of complications are seen at presentation of an acute PVD, but a significant number of vitreous hemorrhages, retinal breaks, and retinal detachments occurred in the subsequent 6 months. These delayed complications demonstrate the importance of routine follow-up to catch missed or evolving pathology. Extended follow-up may be particularly important in male eyes, those with a history of a retinal break or detachment in the fellow eye, pseudophakic eyes, and those with lattice/peripheral retinal degeneration. Most importantly, patients should be educated on the potential

for delayed complications and be given access to immediate care.

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