Mode of delivery in pregnant women at risk for rhegmatogenous retinal detachment: A systematic review

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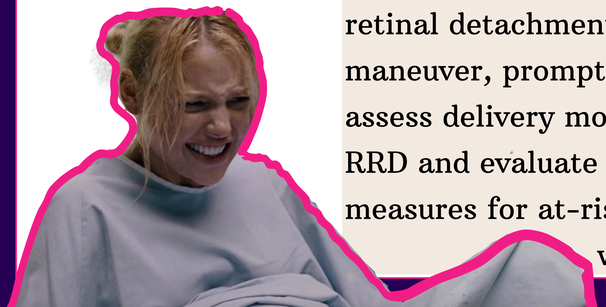
Background and Purpose

Rhegmatogenous retinal detachment (RRD) is essentially a tear in the retina leading to vitreous humor accumulation behind it.



This is different from exudative (serous) retinal detcahment which occurs in absence of any tears due to the tractional force of retinovascular disorders such as severe preeclampsia

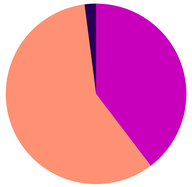
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Many doctors may recommend cesarean sections due to reported associations of rhegmatogenous retinal detachment with Valsalva maneuver, prompting our study to assess delivery mode's relation to RRD and evaluate practice measures for at-risk pregnant women.

Results

This study included 14 studies with a total of 216 patients. The total number of deliveries was 264, including 10 from case reports. Of these, 136 were spontaneous vaginal deliveries, 7 were assisted vaginal deliveries, and 121 were cesarean sections.



- assisted vaginal delivery
- spontaneous vaginal delivery
- cesarean section



The women had ophthalmic conditions such as a history of RRD, Stickler syndrome, high myopia, and lattice degeneration. A substantial portion of the studies reported no postpartum visual complications or fundal abnormalities following both delivery methods vaginal and caesarian. In retrospective analyses, recurrent RRD following VD and CS occurred at similar rates, 5% and 7.5 % respectively.

Methods

Scopus, Google Scholar, PubMed, and Cochrane library were searched for observational studies on the incidence of RRD in association with the delivery method. Screening and data extraction were done twice independently. The main outcome compared was the incidence of RRD for different delivery methods.



Conclusion

The study findings suggest that the method of delivery, whether spontaneous vaginal, assisted vaginal, or cesarean section, does not impact the recurrence of rhegmatogenous retinal detachment in individuals considered to be at high risk. Our study concludes the need for evidence-based obstetric guidelines for different conditions and sythat are related to rhegmatogenous retinal detachment