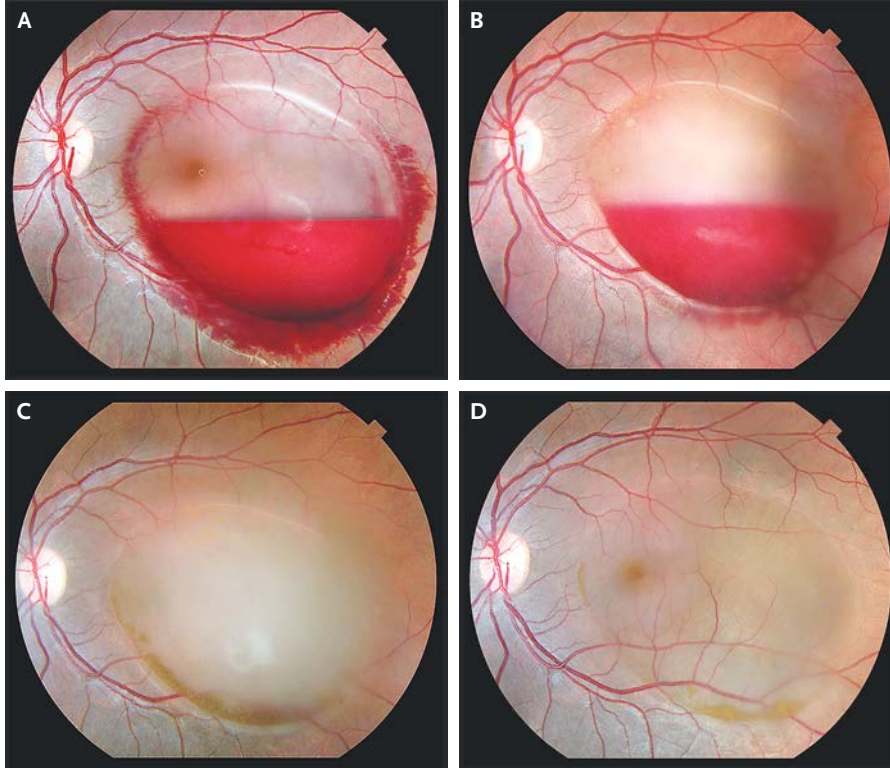


IMAGES IN CLINICAL MEDICINE

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Valsalva Retinopathy



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A 25-YEAR-OLD WOMAN AT 11 WEEKS OF GESTATION PRESENTED WITH SUDDEN, PAINLESS, CENTRAL “DARK” vision after an episode of forceful vomiting (“morning sickness,” or emesis gravidarum). Visual acuity was 20/80 in the left eye. Funduscopy revealed preretinal hemorrhage that had an air–liquid level and was enclosed by a dome-shaped preretinal membrane, features consistent with Valsalva retinopathy (Panel A). Examination of the right eye was normal, as were the blood pressure, complete blood count, prothrombin time, activated partial-thromboplastin time, and fasting blood glucose level. Improvement was seen at 2 weeks (Panel B), 2 months (Panel C), and 5 months (Panel D) after presentation, and the hemorrhage finally resolved. Visual acuity in the left eye improved to 20/25. Typically self-limiting, Valsalva retinopathy is caused by retinal capillary rupture after abrupt rises in intraocular venous pressure, which may occur with violent coughing or vomiting. The dome-shaped area can represent the posterior hyaloid or internal limiting membrane, or both. These preretinal structures are closely apposed to the retinal surface in young adults, although hemorrhage can dissect tissue planes and fill the potential spaces. Pathological analysis of the preretinal membrane after surgery is necessary to unambiguously identify it as the posterior hyaloid or internal limiting membrane and to determine whether the hemorrhage is subhyaloid or beneath the internal limiting membrane. Subhyaloid and internal-limiting-membrane hemorrhages can also occur with hematologic dyscrasias and cancers, hypertension, the rupture of a retinal macroaneurysm, subarachnoid hemorrhage, and the shaken-baby syndrome. Treatment options are laser membranotomy, vitrectomy, or as in this patient, observation.

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