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Spontaneous Rupture of Anterior Lenticonus in a Patient With Alport Syndrome

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AN 8-YEAR-OLD BOY WITH ALPORT SYNDROME, DUE TO mutation in the COL4A5 gene, presented to our clinic with evidence of a cataract ([Figure 1A](#)) and anterior lenticonus ([Figure 1B](#)). Visual acuity at presentation was hand motion. Three weeks later, he presented for preoperative evaluation and was noted to have a rupture of the anterior capsule with cortical material extending into the anterior chamber ([Figure 1C](#)). He and his family denied any trauma. Intra-operative ultrasound biomicroscopy of the anterior segment demonstrated anterior capsular rupture and cortical material extruding into the anterior chamber ([Figure 1D](#)). Extracapsular cataract extraction, anterior vitrectomy, and sulcus intra-ocular lens placement were performed. Alport syndrome is a multisystem disease characterized by kidney disease, hearing loss, and eye abnormalities (eg, corneal erosions, lenticonus, and dot-and-fleck retinopathy). The disease is caused by mutations in the COL4A genes, which encode type IV collagen and lead to structural weakness in the anterior lens capsule.^{1,2} While spontaneous rupture of the anterior capsule has been reported previously, it is a rare complication of Alport syndrome.^{2,3} The exact mechanism is likely related to cumulative structural weakness of the anterior capsule.⁴

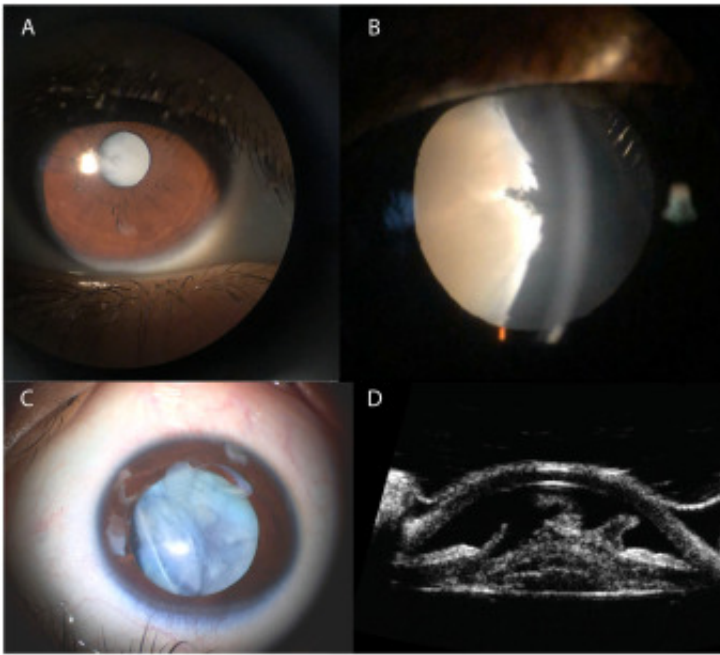


FIGURE 1

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References