BACKGROUND: Retinal detachments induced by cytomegalovirus (CMV) retinitis can often be treated successfully with a buckling procedure combined with vitrectomy and silicone oil instillation, but this technique yields varying visual results. METHODS: To minimize operational trauma, pars plana vitrectomy and silicone oil instillation without additional buckling was performed in a series of 11 consecutive patients with acquired immune deficiency syndrome (AIDS) and CMV-retinitis-induced retinal detachment. Surgery was performed early in the course of the retinal detachment: 6 patients (55%) had an attached macula, and 7 patients (64%) had a visual acuity of 20/200 or better. RESULTS: After a mean follow-up period of 5 months (range, 1-9 months) 9 patients (82%) had a completely reattached retina and 9 patients (82%) had visual acuity of 20/200 or better. The macula was reattached in all patients. A localized detachment of the inferior retina was noted in 2 patients (18%), and a second operation was required in one eye. Significant cataract formation occurred in two patients during the follow-up period. Proliferative vitreoretinopathy and increased intraocular pressure were not observed. CONCLUSION: Early vitrectomy without additional buckling procedures is justified in patients with CMV-associated retinal detachment because it stabilizes the retinal situation without major complications and improves visual function.