An 80-year-old man had intraoperative loss of an intraocular lens (IOL) in the vitreous and simultaneous implantation of an anterior chamber lens. For the first 3 years his course was uncomplicated, but after this time he noted monocular double vision. The IOL in the vitreous had moved into the optic axis of the eye. The case presented here underlines the possibility of complications occurring even years after surgery due to an IOL left behind in the vitreous. The double IOL implant technique should be reserved for very few selected indications.