

Couching in Africa: Technique and Management of Comorbidities With Cataract Removal, Glued IOL, and Vitrectomy

To the Editor:

Despite technological advances, couching is still a prevalent method of cataract removal in many parts of Africa.¹⁻³ Lack of upgraded ophthalmic services and ignorance persuades patients to undergo the ancient and primitive practice of couching to attain practically useful vision. The concept of performing couching is to dislodge the mature cataract from the visual axis with a sharp instrument that pierces the eye approximately 3 to 5 mm away from the limbus (**Figure 1** and **Video 1**, available in the online version of this article). A literature search described couching along with its side effects and complications.

The authors present the postoperative results of performing a vitrectomy, removal of couched nucleus, and glued intraocular lens (IOL) fixation in all cases (**Video 2**, available in the online version of this article).⁴ In cases with a subluxated lens, the nucleus was levitated to the anterior chamber and removed through a corneoscleral incision, whereas cases with a

dropped nucleus underwent the sleeveless phaco tip–assisted levitation procedure.⁵

The surgical procedure was performed in 9 eyes of 9 patients and all had a minimum follow-up of 9 months. The corrected distance visual acuity (logMAR values) in the preoperative period and at 1 week and 1 month postoperatively was 1.68 ± 0.65 , 1.12 ± 0.63 ($P = .012$), and 0.51 ± 0.65 ($P = .001$), respectively. A statistically significant difference was observed between the preoperative and postoperative corrected distance visual acuity at 1 week and 1 month postoperatively, although one patient had no change in visual acuity due to associated macular scarring. No significant change in visual acuity was observed between 1 and 9 months postoperatively. This could be attributed to subsidence of inflammation due to medications and improvement in corneal clarity immediately postoperatively. Two patients had an associated preoperative retinal detachment that was resolved intraoperatively. Functional recovery of vision was attained for both of these cases in the postoperative period, although patient 2 had cystoid macular edema that was present at the last follow-up visit. There was no significant difference noted in the mean intraocular pressure at 1 week and 1 month postoperatively.

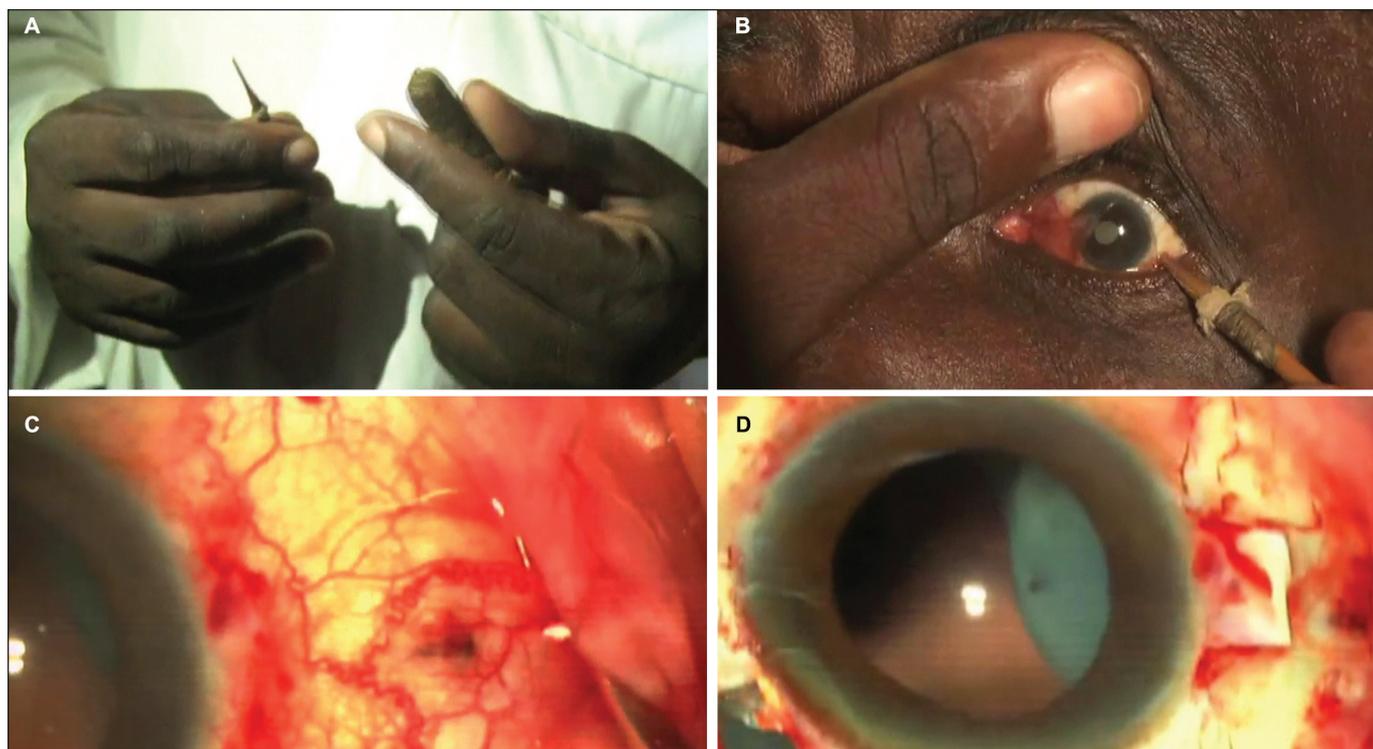


Figure 1. Couching device and method. (A) Sharp instrument (right hand) with a cap (left hand) used for performing couching. (B) The sharp instrument pierces the eye at a distance of 3 to 5 mm from the limbus and is rotated until the nucleus dislodges from the visual axis. (C) The couching entry wound depicting incarceration of the uveal tissue. (D) The subluxated mature cataract.

The entire system of performing couching is closely guarded and medically untrained personnel perform the procedure secretly. The authors came across these cases in the outpatient department of their hospital in Nigeria and the treatment was offered to all patients. The data presented are probably just the tip of iceberg because many if not all of the local patients refuse to go to tertiary care centers for their treatment. A multidisciplinary approach is essential because there can be associated posterior segment complications.

The authors performed the glued technique IOL for IOL fixation in all cases. Nevertheless, the IOL can also be fixated with other methods of secondary IOL fixation. The combination of performing adequate vitrectomy with nucleus removal and glued IOL fixation helps to provide functional and optimal vision that can be achieved in a case, taking in to consideration the associated comorbidities.

Although longer follow-ups were scheduled, patients were lost to follow-up, which could be due to either financial restraints or lack of awareness. Nevertheless, the results of performing combined surgeries are encouraging despite the fact that these eyes were exposed to a traumatic surgery such as couching.

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