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Clinical Approach to Black Cataract: Report of Three Cases

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Abstract | **Case Report**

Senile cataract remains the leading cause of blindness in Morocco, accounting for 54.6% of cases. Black and brown cataracts represent advanced forms that are particularly challenging to manage surgically. Phacoemulsification, although the gold standard, is technically difficult in these cases and associated with higher risk of intra- and postoperative complications. We report three cases of black cataract managed by manual extracapsular cataract extraction (ECCE) with intraocular lens implantation. Despite intraoperative vitreous loss in two cases, postoperative outcomes were favorable with improved visual acuity. These cases highlight the relevance of ECCE and small incision cataract surgery (SICS) as effective alternatives to phacoemulsification in the management of advanced black cataracts, especially in resource-limited settings.

Keywords: Black cataract; Extracapsular cataract extraction; Small incision cataract surgery; Case report.

INTRODUCTION

Senile cataract is the main cause of blindness in Morocco, responsible for 54.6% of cases according to the national ENCPDV survey (1992). Other causes include glaucoma (14.3%), corneal diseases (10.4%), posterior segment lesions (9.1%), and refractive errors or amblyopia (1.3%). Although phacoemulsification is the current standard technique for cataract surgery worldwide, it is technically demanding in advanced black and brown cataracts. These dense nuclei require prolonged ultrasonic energy, which increases the risk of corneal endothelial damage, posterior capsular rupture, and vitreous loss. Extracapsular cataract extraction (ECCE) and small incision cataract surgery (SICS) remain useful alternatives, especially in countries with limited resources. We report three cases of black cataract that illustrate the surgical challenges and outcomes of this condition.

CASE PRESENTATIONS

Case 1

An 80-year-old woman, with no relevant medical history, presented with progressive bilateral vision loss for three years. Ophthalmic examination revealed visual acuity of hand motion in the right eye and counting fingers at near in the left eye. Bilateral peripheral corneal dystrophy was observed. The right eye had a total black cataract (PEC 3+), while the left eye showed cortico-nuclear and posterior subcapsular cataract (PEC 2+). The patient underwent manual ECCE with intraocular lens (IOL) implantation in the right eye. Postoperative recovery was uneventful, and best-corrected visual acuity (BCVA) improved to 4/10.

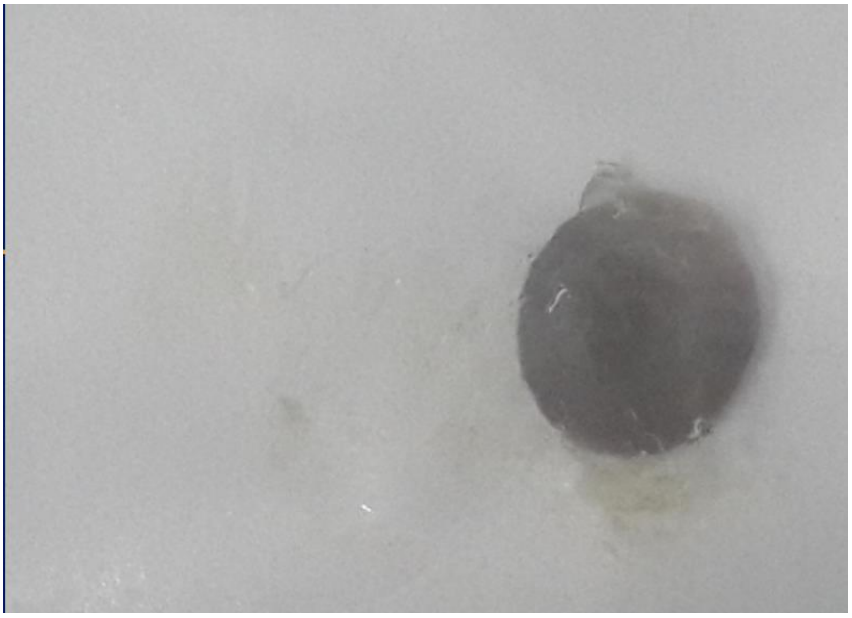
Case 2

A 78-year-old woman reported progressive bilateral vision loss over four years. Visual acuity was limited to light perception in both eyes. Clinical examination revealed bilateral peripheral corneal

dystrophy and a total black cataract in the right eye (PEC 2+). The patient underwent ECCE with IOL implantation in the right eye. Intraoperatively, vitreous loss occurred, but postoperative recovery was favorable, with BCVA reaching 2/10.

Case 3

An 84-year-old man presented with bilateral progressive visual decline for five years. Examination showed visual acuity of 1/10 in the right eye and light perception in the left eye. The right eye presented a cortico-nuclear and posterior subcapsular cataract, while the left eye had a total black cataract. ECCE with IOL implantation was performed in the left eye and complicated by vitreous loss. Despite this, postoperative BCVA improved to 5/10.



DISCUSSION

Black and brown cataracts remain relatively frequent in developing countries due to limited awareness, poor access to healthcare, and late presentation. These advanced forms of cataract represent a significant surgical challenge. Phacoemulsification is considered the gold standard for cataract surgery; however, in dense black cataracts, it carries a higher risk of complications. The need for prolonged ultrasound energy increases the likelihood of corneal endothelial

damage, posterior capsular rupture, and vitreous loss. In such cases, ECCE and SICS are reliable alternatives. ECCE allows removal of the hard nucleus through a larger incision, avoiding excessive ultrasound use. SICS, using a self-sealing scleral tunnel, offers the advantages of smaller incision, reduced postoperative astigmatism, and faster rehabilitation, with functional results close to phacoemulsification according to the literature. In our series, ECCE with IOL implantation allowed significant visual improvement despite intraoperative vitreous loss in two cases. Postoperative visual acuity ranged between 2/10 and 5/10, confirming the benefit of surgery even in advanced stages. However, earlier intervention would likely have yielded better results.

CONCLUSION

Black and brown cataracts remain a surgical challenge, particularly in resource-limited countries where patients often present at advanced stages. While phacoemulsification remains the gold standard, ECCE and SICS are effective alternatives in the management of these cases. Their use can provide satisfactory visual outcomes and reduce the burden of blindness associated with advanced cataracts.

REFERENCES

- Minassian DC, Mehra V. 3.8 Million blinded by cataract each year: projections from the first epidemiological study of incidence of cataract blindness in India. Br J Ophthalmol. 1990;74(6):341–343.
- Gogate P, Deshpande M, Nirmalan PK. Why do phacoemulsification? Manual small incision cataract surgery is almost as good, but less expensive. Ophthalmology. 2007;114(5):965–968.
- Thulasiraj RD, *et al.,* Outcomes of cataract surgery in South India: an analysis of 1,553 cases. Ophthalmic Epidemiol. 1998;5(2):91–101.