

## Visual Outcome after Manual Small Incision Cataract Surgery in Lagos, Nigeria

Ewete T and Alabi A.S

Eye Unit, Me Cure Healthcare Limited, Lagos, Nigeria

**Corresponding author:** Ewete T,

Email: [drewete@mecure.com.ng](mailto:drewete@mecure.com.ng); [temidemi2000@gmail.com](mailto:temidemi2000@gmail.com)

**Introduction:** An assessment done by the WHO found cataracts accounted for 51% of the causes of global blindness and 33% of visual impairment, inclusive of blindness.<sup>1</sup> The Nigerian National Blindness and visual impairment survey 2005 to 2007 found that 42.9% of blindness was due to cataract.<sup>2</sup>

### Methods:

**Study design:** Retrospective study of individuals that had undergone manual small incision cataract surgery (MSICS) at the Eye Center. Axial length measurements were performed using the IOLMaster (Carl Zeiss Meditec AG, Jena, Germany). Those cataracts too dense to have proper biometry using the IOLMaster had A scan done using the Quantel medical Axis II (Quantel Medical, France) and Keratometry readings were done using the Topcon Autokeratorefractometer KR-8900 (Topcon Corporation, Tokyo, Japan). Various formulas were used to determine the IOL power depending on the axial lengths; Hoffer Q (for axial lengths <22), Holladay, Hoffer Q, SRK-T (for axial lengths 22.0-24.5), Holladay (for axial lengths 24.5-26) and SRK-T (for axial lengths >26.0). Six Ophthalmologists trained in manual small incision cataract surgery performed the surgeries.

**Inclusion Criteria:** Adults 18 years and above whom had Manual small incision cataract surgery at the MeCure Eye Centre.

**Exclusion Criteria:** Age less than 18 years, previous history of glaucoma, past history of macular or retinal diseases, previous ocular surgery.

**Results:** A total of 140 eyes of 116 patients were analyzed. There were 56 males and 60 females. The mean age was 65.15 ±11.03 years.

**Discussion:** Cataract surgery is one of the most commonly performed surgeries in Nigeria.<sup>(3,4)</sup> The mean age in this study was 65.15 ±11.03 years. About 68% had vision <3/60 before surgery was done (Table 1), similar to other African studies where most patients present for cataract surgery

**Table 1:** Presenting visual acuity before surgery

VISUAL ACUITY	Number/%
6/6-6/18	9(6.4)
<6/18 – 6/60	33 (23.6)
<6/60 – 3/60	3 (2.1)
<3/60	95 (67.9)
<b>Total</b>	<b>140 (100)</b>

when blind<sup>5,6</sup>. Uncorrected visual acuity 1 week postoperatively was good in 81 eyes (57.9%). Four weeks postoperatively, uncorrected visual acuity was good in 66.4%. Presenting visual acuity was good in 75.2% of 133 eyes at 12 weeks postoperatively. The visual acuity with available correction in this study was good in 118 (88.7%) eyes that had MSICS (Table 2).

**Table 2:** Visual acuity with available correction at twelfth postoperative week

VISUAL ACUITY	N (%)
6/6-6/18	118 (88.7)
<6/18 – 6/60	10 (7.5)
<6/60 – 3/60	1 (0.8)
<3/60	4 (3.0)
<b>Total</b>	<b>133 (100.0)</b>

**Conclusion:** Good visual outcome is possible after Manual Small incision cataract surgeries in developing countries.

### References

1. Global Data on visual impairment 2010. [www.who.int/blindness/GLOBAL\\_DATAFINA\\_Lforweb.pdf](http://www.who.int/blindness/GLOBAL_DATAFINA_Lforweb.pdf) .
2. Abdul MM, Sivasubramanian S, Murthy GV, Gilbert C, Abubakar T, Ezelum C, Rabi MM, Nigeria National Blindness and Visual Impairment Study Group. Causes of blindness and visual impairment in Nigeria. The Nigerian National Blindness and Visual Impairment survey. Invest Ophthalmol Vis Sci 2009; 50:4114-4120
3. Adio AO. A review of ocular surgeries over a ten-year period in the University of Port Harcourt Teaching Hospital, Rivers State, Nigeria. Niger J Ophthalmol 2007; 15(1): 17-21.

#### Abstracts

4. Onyekonwu CG. Uptake of Ocular Surgeries at Ebonyi State University Teaching Hospital (EBSUTH), Abakaliki, Nigeria. *Niger J Ophthalmol* 2008; 16(2): 39-43.
5. Olawoye OO, Ashaye AO, Bekibele CO, Ajayi BGK. Visual Outcome after cataract surgery at the University College Hospital Ibadan. *Ann Ibd Pg Med* 2011. Vol 9, No1.8-13.
6. Nwosu SNN, Onyekwe LO. Intraocular Lens Implant Surgery in Onitsha, Nigeria. *Niger J Ophthal* Aug 2002; 10(1): 5-9.