

### Eight Year Pattern of Oculoplastic Surgeries at the National Eye Centre, Kaduna

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**Background:** The National Eye Centre is a tertiary ophthalmic institution with a mandate for service, training and research. Sub-specialist clinical services in ophthalmology fully commenced in 2010 with cornea/anterior segment, glaucoma & cataract, retina, paediatrics and orbit/oculoplastics.

Ophthalmology basic training includes some orbit/oculoplastics e.g. various eye removal procedures, lid repairs, thyroid eye management, however, oculoplastics still seemed novel in the institution as a sub-specialty. Activities were medical and surgical care; adjunctive services for cosmetic rehabilitation using various prosthetic devices. Collaboration with other experts (maxillofacial, ENT) and capacity development with more training in the subspecialty also occurred. From one Consultant with subspecialty training at the inception in 2010, to 3 consultants so trained, addition of ocularistry services and more surgeries done. The study was undertaken to review the pattern of oculoplastic surgical procedures over the said period with a view to:

- Contribute to the database of the sub-specialty,
- Aid in directing the focus on training & infrastructure in resource-challenged settings.

**Methods:** A total of 2,060 surgeries were performed at the National Eye Centre during the period. Of these, 831 (40.3%) were oculoplastic surgeries. Eyelid surgeries (40.8%) were the most common type of oculoplastic surgery performed (Table 1). Among these, repair of eyelid malpositions (ectropion, entropion and ptosis) made up 44.5% of all eyelid surgeries (Table 2).

Orbital surgeries accounted for 27.3% of oculoplastic surgeries. Enucleation/exenteration/evisceration with & without implants made up 61.2% of orbital surgeries, while socket

**Table 1:** Distribution of oculoplastic surgeries performed

Surgery	Number	Percentage
Eyelid	339	40.8
Orbit	227	27.3
Conjunctiva	168	20.2
Lacrimal	62	7.5
Others	35	4.2
<b>Total</b>	<b>831</b>	<b>100</b>

reconstruction and orbitotomy accounted for 10.6% and 21.5% respectively.

Lacrimal surgeries were mainly dacrocystorhinostomy (33.9% of lacrimal surgeries) and probing and syringing (59.7%).

**Table 2:** Distribution of eyelid surgeries

Surgery	Number	Percentage
Repair/Reconstruction	65	19.2
Tumour de-bulking/ excision	60	17.7
Ectropion with FTSG	51	15.0
Entropion repair	49	14.5
Ptosis	45	13.3
Ankyloblepharon	18	5.3
Incision and Curettage	18	5.3
Electrocautery	11	3.2
Tarsorrhaphy	10	2.9
Ectropion with LTS	6	1.8
Intralesional steroid Injection	3	0.9
Incision and Drainage	2	0.6
Anterior Lamellar reposition	1	0.3
<b>Total</b>	<b>339</b>	<b>100</b>

FTSG - Full-thickness skin graft

LTS - Lateral tarsal strip

Punctoplasty and canaliculoplasty made up the remaining 6.4%. The bulk of conjunctival surgeries were excision biopsies of benign conjunctival growths (77%) and OSSN excision (10.4%). Ocularistry services commenced late 2016 with patient counseling on socket care and prosthesis fitting. A total of 100 stock prosthesis have been fitted while four customized prosthesis were produced.

**Table 3:** Distribution of orbital surgeries

Surgery	Number	Percentage
Exenteration	45	19.8
Orbitotomy and Excision	39	17.2
Evisceration	34	15
Socket reconstruction	24	10.6
Evisceration with implant	20	8.8
Modified exenteration	17	7.5
enucleation	12	5.3
Enucleation with Implant	11	4.8
Orbitomy and Incision	10	4.4
Orbital Fat Excision	6	2.6
Secondary Orbital implant	4	1.8
Incision and Drainage	4	1.8
Orbital implant removal	1	0.4
<b>Total</b>	<b>227</b>	<b>100</b>

**Discussion:** Strictly oculoplastic cases were 40% of all surgeries. Cataract surgery still leads in the department. Eyelid and orbital surgeries are highest Oculoplastic, with combined proportion of 68.1% (566 cases) leading credence to their potential in facial cosmesis and its attendant social and psychological impact even with good vision.<sup>1</sup> Eyelid malpositions proportion are similar to the 31.7% in similar studies.<sup>1</sup> Lid repair at 19.2% constituted a lower proportion of eyelid cases, in comparison with similar studies, where repairs made up 49% of lid surgeries.<sup>2</sup> Eye removal surgeries made up 61.2% of orbital surgeries in this study compared to 50% in some other studies.<sup>3</sup> Lacrimal surgeries at 7%, was less than in Asian studies where racial variation in nasolacrimal anatomy is postulated as predisposing to more surgical intervention.<sup>4</sup> Conjunctival surgeries differed from some studies probably as this included all Oculoplastic cases.<sup>5</sup> While many patients tolerated stock prosthesis, cost of customized eyes is prohibitive for several patients. Oculoplastics as an emerging subspecialty parades several surgical interventions. Availability of personnel & support have offered promise for increased uptake of its surgical content.

### References

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