

# ORBIT AND OCULOPLASTY

## Pathological uptake and outcomes of ocular surface tumours in an ophthalmic subspecialty hospital in southeast Nigeria

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**Introduction:** The ocular surface interacts with the tear film to create a smooth refractive surface for clarity of vision<sup>1</sup>. Tumours of the ocular surface have the potential for malignant destruction of the globe, loss of vision and potential loss of life. They may be managed medically, using steroids or chemotherapeutic agents<sup>2</sup>. The gold standard for treatment is surgical excision<sup>3,4</sup> using the Shields no-touch technique<sup>5</sup> with advantage of tissue for histopathological diagnosis and cure.

**Objective:** To assess the uptake and outcomes of histopathology for ocular surface biopsies in a tertiary eyecare centre in Nigeria.

**Methods:** We retrieved the data of all patients who underwent surgery at a tertiary eyecare centre (The Eye Specialists Hospital (TESH)) in Enugu, from 2011 to 2022. Oculoplastic surgeries were extracted and ocular surface procedures were analysed using Microsoft Excel version 2402.

**Results:** A total of 3181 surgeries were performed during the 12-year study period. There were 212 Oculoplasty cases with 23 ocular surface procedures and 20 were tumour excisions. Histopathology was available for only 45 % (9) of biopsies performed. There were 11 males (55%) with age range from 24 to 85 years and the mean age was 50 years. The clinical diagnoses of

tumours and the availability of histopathological reports are displayed in Table 1. The specific histopathologic outcomes of the nine biopsies are presented in Table 2.

Pyogenic granulomas excised by 6 different surgeons, had no histopathological diagnosis. Cystic conjunctival masses, excised by 3 different surgeons, had no pathology reports. Files could not be traced for 2 biopsy patients. The maximum follow-up period was 6 years with no recurrence reported, while some patients never showed up after surgery.

**Discussion:** Histopathology was malignant in 55%. Clinical diagnosis of a benign condition appears to be a deterrent to ordering a histopathological evaluation of the excised sample in this series. However, the possibility of clinical masquerade syndromes should discourage this trend because valuable academic data as a basis for policy-making is lost. Gichuhi *et al*<sup>6</sup> reported that OSSN couldn't be distinguished from benign lesions by clinical features alone. There was 100% histopathological uptake with clinical suspicion of a malignancy.

**Conclusion:** Histopathological uptake was 100% for suspicious masses or malignant tumours but should be mandatory for all human biopsies.

**Keywords:** Ocular Surface Squamous Neoplasia, Melanoma, Oculoplastics, The Eye Specialists Hospital (TESH), Subspecialty, Ophthalmic Plastic Surgery

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### Surgical Decision Making in the Management of the Contracted Anophthalmic Socket – a Tertiary Eye Centre Experience.

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**Background:** An anophthalmic socket is devoid of an eyeball, often following non-salvageable ocular injuries, severe ocular infections, and ocular/orbital malignancies. It could be congenital on rare occasions, though most cases are acquired. The anophthalmic socket undergoes progressive structural deformity and complications that preclude retention of the desired ocular prosthesis. Contracted socket is a common complication resulting in the inability to retain an ocular prosthesis, unacceptable functional and aesthetic deficits, and negative

impact on the quality of life<sup>1</sup>. Surgical reconstruction of the contracted socket is often indicated and can be quite challenging for the oculoplastics surgeon<sup>2,3,4</sup>. This study aims to assess the complications arising in the acquired anophthalmic sockets and factors guiding surgical decision-making in managing contracted anophthalmic sockets with the goal of achieving improved surgical, functional, and aesthetic outcomes.

**Methods:** A cross-sectional hospital-based study of acquired anophthalmic patients presenting from January 2018 – December 2022 to the Oculoplastics clinic of a tertiary eye centre was conducted. Data sources were clinic and surgical theatre records. Relevant demographic data were obtained, and clinical evaluations were performed to document complications arising in the anophthalmic socket. Vertical and horizontal conjunctival dimensions and forniceal depths were measured with Castroviejo’s Callipers. Surgical decision-making on the choice of appropriate surgical procedure for contracted socket reconstruction was based on Gopal Krishna classification<sup>5</sup> and conjunctival surface dimensions.

Patients with conjunctival vertical dimensions 40 - 45mm were offered fornix suture deepening procedure, and those with 35mm without volume loss had oral mucous membrane graft, while those with surface and volume loss in Grades 3 -5 Gopal Krishna classifications<sup>5</sup> had dermis fat graft surgery done. Patients were followed up for six - months postoperatively. Successful surgical outcome was defined as adequate conjunctival fornices with the ability to retain the prosthesis satisfactorily.

Ethical approval was obtained from the institutional health research and ethics committee. The study complied with the Tenets of the Helsinki Declaration.

**Results:** A total of 1,464 new oculoplastic patients presented during the study period. 89 (6.1%) presented with acquired anophthalmic sockets. Age ranged between 3 - 86 years with a mean of 36.8±22.5 years. 57 (64%) were females and 32 (36%) were males. Leading aetiology of anophthalmic sockets was trauma 58 (65.1%), followed by severe ocular infections 16 (18.0%), and intraocular tumours 10 (11.8%). The most common complications necessitating surgery