

orbital rim in a diagonal direction upward and laterally (Figure 2). The strip included the orbital, septal and distal part of the pretarsal

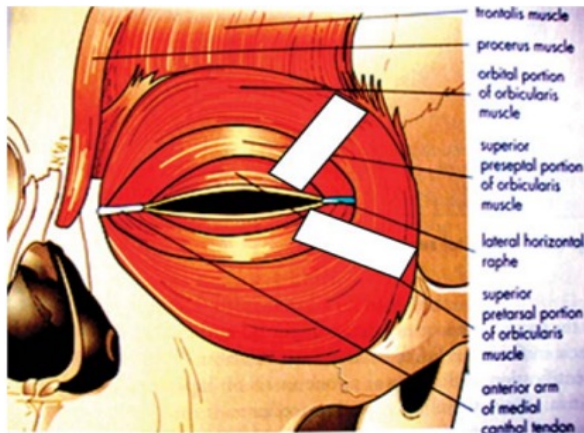


Figure 2: Diagram showing the principle of minimal orbicularis oculi myectomy.³ Excision of a block strip of the muscle creates a large gap in the circularly running fibers, such that when the remaining fibers contract, the lid would not close forcibly because of a break in their continuity, hence, spasm is prevented.

orbicularis muscle. Care was taken to leave the proximal half of the pretarsal muscle intact. The lower eyelid orbicularis muscle was exposed through a sub-ciliary skin incision and an 8 mm wide strip of orbicularis muscle was excised in a similar fashion to the upper eyelid. The same procedure was done on the contralateral eyelids. Incisions were closed with 5/0 Vicryl suture in an interrupted fashion. Pressure dressings were applied for 24 hours. She was prescribed prophylactic antibiotics and anti-inflammatory/analgesic medications.

On the first post-operative day, her blepharospasm had decreased. There was eyelid oedema and ecchymosis. She was prescribed topical methylcellulose eye drops 4 times daily. At 3 weeks follow-up, the blepharospasm had significantly diminished and as well as the eyelid oedema, and she was able to open and close her eyes voluntarily (Figure 1B). Her visual acuity was 6/12 in both eyes and 6/6 with a pinhole. She had sustained significant relief from symptoms at 14 months of follow-up. The patient's consent was obtained to publish this case report.

Conclusion: Minimal orbicularis oculi myectomy was effective in providing long-term

significant relief of spasms. This may be a viable option for the treatment of BEB in low-income countries like Nigeria.

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Clinical activity scores and quality of life in thyroid eye disease: a study among Nigerian patients

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Background: Thyroid eye disease (TED) is a rare, debilitating autoimmune disorder associated with orbital inflammation, pain, proptosis, diplopia, facial disfigurement and in severe cases, visual loss. Consequently, limitations in visual and psychosocial functioning could significantly impact the quality of life (QOL) of affected individuals. The clinical activity score (CAS)¹ and the European Group on Graves' Orbitopathy (EUGOGO) questionnaire^{2,3} are widely used standardized assessment tools for disease severity and impact on QOL, respectively. Efforts to improve the standard of care in TED prompted the adoption of CAS & EUGOGO QOL. This study aims to utilize these tools to assess the impact of TED among Nigerian patients attending a tertiary health institution, with the goal of improving the standard of care.

Methods: A prospective cross-sectional study of all TED patients attending the Oculoplastics unit of the study tertiary centre from January 2017 to June 2024 was conducted. Data collection was done using the Clinical Activity Score (CAS) of the Graves' Orbitopathy Clinic proforma for new patients and the self-administered GO-QOL EUGOGO questionnaire (English Version). The visual functioning subscale of the GO-QOL questionnaire was used to assess the impact on activities of daily living such as driving, reading, watching TV, and mobility. The psychosocial subscale was used to assess the impact of TED in the domains of appearance changes, emotional well-being, and social functioning. Patients were categorized according to disease activity, severity, and limitations in visual and psychosocial functioning. IBM-SPSS Version 29 was used for data analysis. Ethical approval was obtained from the Institutional Health Research and Ethics Committee and informed consent was obtained from patients.

Results: Eighty-four patients (aged 17 – 76 years) were studied. There were 71 (84.5%) females. Female-to-Male ratio was 5.5:1. Diagnosis of Graves' disease (hyperthyroidism) was made in 63 (75%), euthyroid in 20 (23.8%) and hypothyroidism in 1 (1.2%). Clinical activity score revealed that 31 (36.9%) had active disease (CAS $\geq 3/7$) and 53 (63.1%) had inactive disease. The associated soft tissue

inflammatory changes are as shown in Figure 1.

Seventy-one (84.5%) had mild TED, while 2 (2.4%) had severe TED. Fifty-nine (70.2%) had mild impairment in QOL. There were limitations in visual and psychosocial functioning in 35 (41.7%) and 39 (46.4%) of the study population, respectively. The various domains of limitations are as shown in Tables 1 and 2,

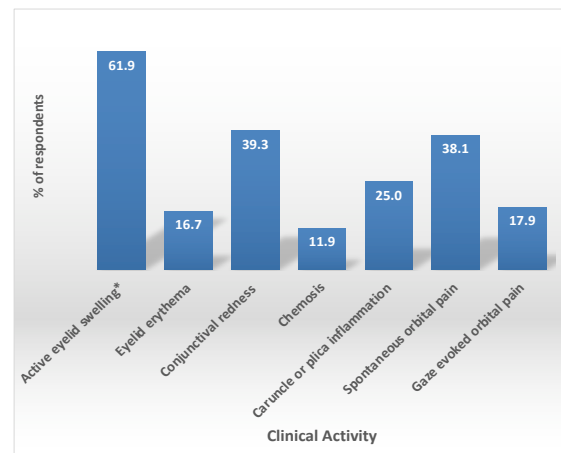


Figure 1: Clinical activity in thyroid eye disease patients

with reading, watching TV and hobby being the leading visual limitations, while feeling of change in appearance, being stared at in the street and avoiding photographs were the leading psycho-social limitations.

Figure 2 shows a negative correlation between CAS and QOL, represented by the visual functioning and psychosocial functioning subscales' scores.

Discussion: We observed a high prevalence of inactive disease (63.1%), though a considerable proportion (36.9%) had active disease with mild severity (84.5%). However, our findings highlight negative correlations between disease activity, as measured by CAS, and patient-reported QOL outcomes. As CAS increases, QOL deteriorates, particularly as related to the visual and psychosocial functioning of affected patients. This is comparable to the findings of earlier authors.^{4,5,6} Important activities of daily living, such as reading, watching TV and being hindered from something they wanted to do, were the leading limitations in terms of visual functioning of the affected patients. Changes in appearance, feeling of being stared at in the

Table 1: Limitations in Visual functioning among thyroid eye disease patients

Visual limitations	Yes, seriously limited *N(84)		Yes, a little limited *N (84)		No, not at all limited	
	n	%	n	%	n	%
Driving	7	8.3	4	4.8	39	46.4
Moving around in the house	7	8.3	16	19.1	59	70.2
Walking outdoors	11	13.1	25	29.8	43	51.2
Reading	21	25.0	25	29.8	33	39.2
Watching TV	17	20.2	25	29.8	38	45.2
Hobby or pastime	13	15.5	22	26.2	44	52.4
	Yes, severely hindered		Yes, a little hindered		No, not at all hindered	
Feel hindered from something you wanted to do because of thyroid eye disease in the past week	16	19.1	26	30.9	40	7.6

*N = Total study population (84 respondents)

Table 2: Limitations in psychosocial functioning among thyroid eye disease patients

	Yes, very much so		Yes, a little		No, not at all	
	n	%	n	%	n	%
Feel appearance changed	44	52.4	22	26.2	18	21.4
Feel being stared at in the street	33	39.3	25	29.8	25	29.8
Feel people's reaction is unpleasant	12	14.3	24	28.6	48	57.1
Influence on self-confidence	20	23.8	27	32.1	31	36.9
Feel socially isolated	17	20.2	19	22.6	47	56.0
Influence on making friends	17	20.2	11	13.1	48	57.1
Appear less often in photos	33	39.3	22	26.2	26	31.0
Masking changes in appearance	24	28.6	25	29.8	28	33.3

CAS and Visual Functioning (negative correlation) CAS and Psychosocial Functioning negative correlation

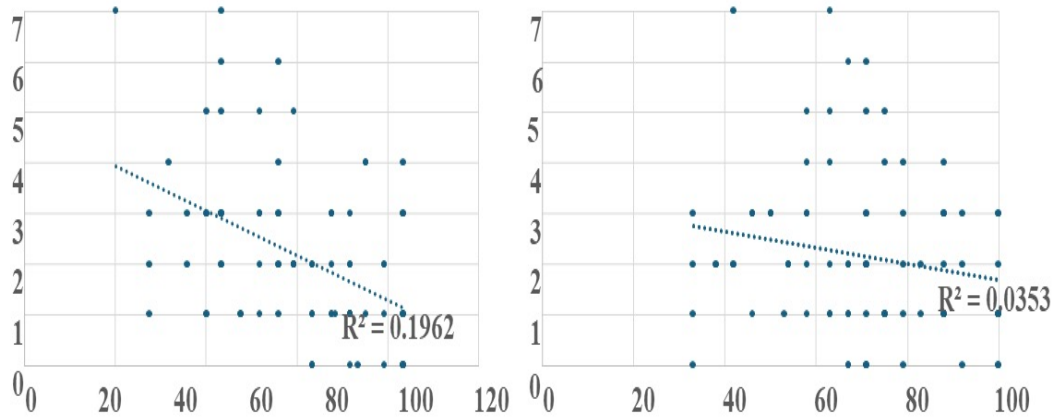


Figure 2: Correlation between CAS and Quality of Life parameters in Thyroid Eye Disease patients

streets, need to mask their appearance, reduced self-confidence and appearing less in photos were the leading psychosocial limitations that were very much affected, similar to the findings of Smith et al⁷ and Beata et al.⁸

Conclusion: The study revealed that a significant proportion of TED patients exhibit disease activity, though a large number had mild disease. TED also exerted a considerable negative impact on QOL, as indicated by the high prevalence of visual and psychosocial dysfunction among the patients. It is recommended that physicians heighten awareness of these limitations and consider using CAS in conjunction with GO-QOL questionnaires to comprehensively evaluate and therefore improve the standard of care of TED patients.

Keywords: Clinical activity score, visual functioning, psychosocial functioning, Quality of Life, Thyroid eye disease, Thyroid orbitopathy.

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