Ocular Complications of Stevens-Johnson Syndrome: Management Challenges Following Cyst Sclerotherapy

Balogun Bolanle [1], Ngwu Rosemary[2] and Egagifo Ochuko[3]

[1]Lagos State University Teaching Hospital/College of Medicine, Ikeja, Lagos, Nigeria.
[2]Lagos State University Teaching Hospital, Ikeja, Lagos, Nigeria.
[3]Ancilla Catholic Eye Hospital, 1 Odumosu Close, Iju Road, Agege, Lagos, Nigeria.
***Corresponding author:** Balogun Bolanle, Email: appleclinic@yahoo.com*

Introduction: Stevens - Johnson syndrome (SVJ)[1] is a type IV hypersensitivity reaction characterized by severe generalized erythematous eruptions of skin and mucous membranes including ocular surface following exposure to antigenic substances. Common ocular complications include corneal conjunctivalization, conjunctival cicatrization, dry eye, symblepharon, trichiasis and ectropion[2,3]. Earlier studies reported rare cyst formation[4,5] and successful cyst sclerotherapy[6,7]. We report another case of SVJ characterized by unusually large pressure exerting palpebral conjunctiva cyst resulting in both functional and cosmetic disturbance with vision-threatening ocular surface burns following 3% Sodium tetradecyl sulphate injection sclerotherapy.

Case Report: A 55-year-old self - employed woman presented with three months gradual painless swelling of the left eyelids, inability to open the eye and eyeball pain due to pressure exerted by eyelid swelling. One-year prior this she developed SVJ with severe generalized skin, oral and ocular mucous membrane eruptions within 24 hours of administration of Septrin* (Co – trimoxazole) and Fansidar* (Sulphadoxine + pyrimethamine) by her physician for pain under the sole of her feet. She wears bifocal glasses, on thrice daily topical tears supplement, allergic to chloroquine and had myomectomy 12 years previously.

Examination revealed generalized hypo & hyperpigmented skin lesions, visual acuity 6/6 right eye, 6/24 left eye and with glasses 6/5 and 6/12 respectively. Intraocular pressure was

Figure 1: Left upper eyelid cyst (top left), cyst seen through everted eyelids (top and below right). CT scan showing cyst 26 x 13 x 13mm (below left).

14mmHg right and 26mmHg left eye. Large lef
ıpper lid cyst (thin – walled, hypodense non
ɜeptate, non- enhancing, 26mm x 13mm x 13mn
ɔn CT scan and multiple left lower lid cysts

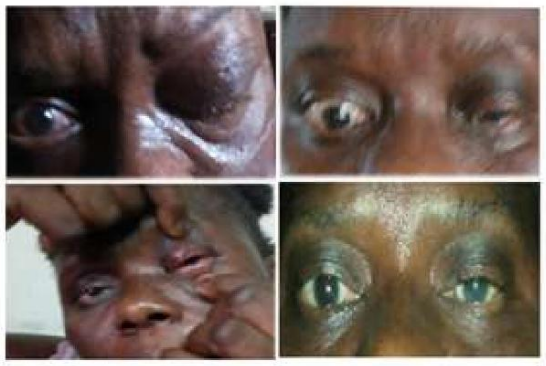

Figure 2: Acute inflammation and iatrogenic ankyloblepharon 1st day post-sclerotherapy (top left picture). Leaky sclerosant (top right). 1st week post-sclerotherapy- resolving inflammation (below left). Corneal leucoma 20 weeks post sclerotherapy - (below right)

symblepharon, scanty right trichiasis and bilateral immature cataract. (Figure 1)

Treatment was by cyst extirpation with injection of 0.4ml (20% of 2ml aspirate) 3% sodium tetradecyl sulphate (sclerosant).

Sclerotherapy caused sac erosion, acute pain, lid edema, temporary ankyloblepharon, conjunctival hyperemia, inferior corneal erosion and reduced vision. Standard therapy for ocular chemical burns was adopted and co – managed with anterior

segment specialist. She had challenging prolonged recurrent inferior corneal epithelial erosions, healing in about 20 weeks with inferior corneal leucoma, pannus, reduced best corrected visual acuity of 6/36. (Figure 2)

Discussion: Ocular surface tissues are typically cicatrized and less resilient following SVJ. Chronic low-grade inflammation occurs even in the presence of a white eye[8]. These increase the risk of recurrent corneal de – epithelialization, corneal neovascularization, severe visual impairment and blindness. Earlier studies [4,5] reported the rare occurrenceof cyst formation following SVJ. The case in study had cysts of functional and cosmetic impact. Dave, *et al*[6] reported 6 cases of conjunctival inclusion cyst in 4 anophthalmic sockets and 2 sighted eyes and concluded that cyst aspiration and foam sclerotherapy is safe, with insignificant inflammation and without ocular surface or implant complications. Naik *et al* [7] also reported that foam sclerotherapy is successful in obliterating periorbital dermoid cysts. On the contrary, our study demonstrated that cyst sclerotherapy following SVJ poses additional vision threatening complications.

Conclusion: Cyst sclerotherapy, though found to be successful in some cystic lesions dictates a call for caution in cases of Stevens - Johnson syndrome. Further studies are also necessary to explore additional risk factors for poor outcome of cyst sclerotherapy in SVJ.

Ethics: Written permission was obtained from the patient.

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