Photo essay

Single Sitting Bilateral Dacryocystorhinostomy for Chronic Dacryocystitis in A Patient with Scleroderma and Bipolar Disorder

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Abstract

A 58 years lady presented with chronic pus discharge in both eyes. On examination a diagnosis of bilateral Chronic Dacryocystitis was made. History revealed a psychiatric illness for which she was taking medication. General examination showed aggressive behaviour, thin, shiny & stretched skin over the face with thinned out lips, radial furrowing & glossy appearance of skin around lips causing fish mouth appearance. Other features were taut, hyper pigmented skin over limbs which were highly supportive of dermatologic manifestations of systemic sclerosis. Bilateral Dacryocystorhinostomy with silicone tube intubation under general anesthesia was advised with regard to patient's psychiatric condition and aggressive nature. Procedure was carried out uneventfully. Remarkable healing of wound site was noticed in spite of her skin condition. Here we report a case of bilateral dacryocystorhinostomy done in same sitting in patient with systemic sclerosis which to the best of our knowledge has not been reported.

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Keywords: *Dacryocystitis, Dacryocystorhinostomy, Scleroderma*

Case History

A 58 years woman presented to our hospital with pus discharge in OU since 6 months. Anterior segment examination was unremarkable except that she had regurgitation of mucopurulent discharge from OU suggestive of Primary acquired nasolacrimal duct obstruction (PANDO). known case of bipolar disorder; she was aggressive and disoriented during evaluation. Skin over har face was thin, stretched and shiny with associated loss of furrows over the forehead. Skin surrounding the lips had radial furrowing giving a characteristic fish mouth appearance (Figure 1). Cardiovascular and Respiratory examination were normal. She was diagnosed to have limited cutaneous scleroderma (Figure 2). Routine Otorhinolaryngology evaluation was done preoperatively to rule out any nasal pathology. She underwent simultaneous bilateral DCR with Mitomycin C (0.2 mg/ml for 3 mins) along with bicanalicular silicone tube intubation under general anesthesia considering her psychiatric condition and systemic ailment.

The procedure underwent uneventfully. At the end, the wound could be well approximated with minimal tension. The scar wasn't appearing firm or fibrosed intra-operatively. She was discharged with topical antibiotic ointment, nasal decongestant, oral antibiotic and analgesic medication. Sutures were removed after 1 week (Figure 3). Patient was followed up routinely at 1, 3 and 6 months (Figure 4). Stents were removed at post op 3 months. Lacrimal irrigation was patent and wound healing was satisfactory in (OU) on each visit.

Discussion

Systemic sclerosis is an autoimmune disease characterised by vasculopathy and fibrosis; a connective tissue disorder having multi-systemic involvement which is progressive and chronic in nature.[1]

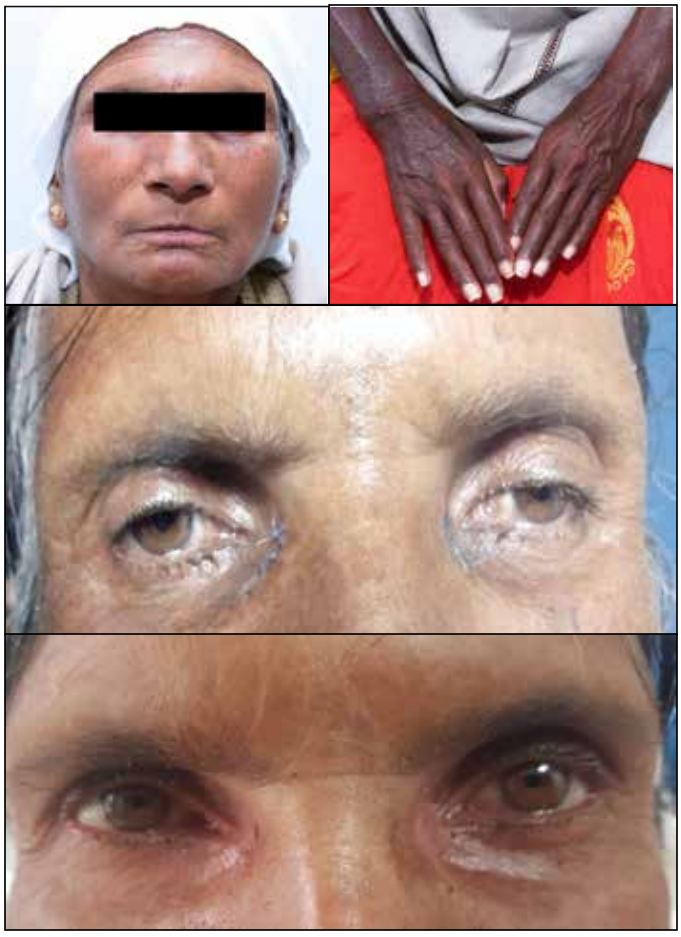

Figure 1: *Photograph depicting typical masked facies with thin stretched skin over the forehead and radial furrowing around lips*
Figure 2: *Photograph showing taut hyper pigmented skin over the distal portion of upper limbs*
Figure 3: *Photograph showing healing scar and sutures in situ at post op 1 week*
Figure 4: *Photograph showing completely healed scar at post op 6 months*

Even though there is abnormal collagen deposition by dermal fibroblast with microangiopathy in systemic sclerosis, the epidermis is found to be more of a favorable nature towards wound healing.[2]

Linear Scleroderma is an uncommon and localized fibrosing disorder and its one variety (en coup de sabre) also known as LScs has been found to cause lacrimal drainage involvement with similar histopathological features.[3]

In a study by Yazici et al, Bilateral simultaneous external DCR was successful in 106 of 112 patients (95%). Simultaneous bilateral surgery provides faster recovery; lessens the need for medication, decreases post-op visits, shortens operative time and has economic advantages. If patient needs General anesthesia simultaneous bilateral surgery decreases anesthesia related mortality and morbidity.[4] They also provide bilateral resolution of symptoms and confer an immediate improvement in quality of life.[5,6]

Most serious complication of DCR is hemorrhage which can hinder and delay the procedure and affect the outcome and may also lead to a situation where surgery on the other side may have to be cancelled. Bilateral DCR is preferred in children but they are also susceptible to more blood loss due to low blood volume. Prophylactic pre-op antibiotics contribute to low incidence of wound infection in cases of Bilateral DCR.

Our patient, an established case of limited cutaneous scleroderma and bipolar disorder (non-compliant to anti-psychotic medication) was thus considered for bilateral DCR procedure under general anesthesia which is not done routinely with the outcome being more satisfactory than expected.

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