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# Lip Synechia: An Unusual Complication in Stevens–Johnson Syndrome Amenable to Surgical Correction

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## **Quick Response Code:**



## Dear Editor,

Stevens–Johnson syndrome (SJS) is a severe mucocutaneous adverse reaction to drugs, clinically presenting as mucocutaneous erythema, target-like macules, tenderness and extensive full-thickness epidermal detachment. An unusual complication of SJS is the formation of lip synechiae, which may develop as the mucosal erosions heal; the exact incidence of which is unknown. Herein, we report a case of SJS that developed synechiae at the labial commissures as a complication and was subsequently released surgically.

A 19-year-old boy presented with a 3-day history of redness of eyes and a 1-day history of painful lesions of the oral mucosa and skin. Cutaneous examination revealed multiple discrete well-defined, circular erythematous macules with sizes ranging from 0.5 to 1 cm, distributed over the face, trunk and upper limbs. The majority of the lesions over the trunk had central necrosis and crusting. Mucosal involvement was present in the form of oral erosions, haemorrhagic crusting over the lips, involving bilateral commissures, conjunctival congestion and erythema over the glans. There was a restricted mouth opening at the time of presentation associated with oedema of the lip and cheek. A review of all systems showed no abnormality clinically. A history of intake of phenytoin tablet 300 mg/day since the preceding 20 days, prescribed for an idiopathic seizure disorder, was elicited. A diagnosis of SJS was made based on the clinical findings and the corroborative drug history.



Figure 1: Post-operative wound site dressing done with mupirocin and paraffin gauze, and stay sutures put over the bilateral labial commissures.

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**Figure 2:** (a-c) Oral mucosa showing synechiae formation at the labial commissures bilaterally; (d-f) Bilateral labial commissures showing re-epithelialization with no recurrence of synechiae after 4 weeks.

The SCORTEN revealed a score of zero on the day of admission and the Naranjo algorithm revealed a causal association of six (probable association) with phenytoin. A severity of level 4 (moderate severity) was found as per the Hartwig severity assessment scale.

The patient was started on oral cyclosporine at a dose of 6 mg/kg/day with which there was a reduction in the perilesional erythema of the skin lesions and erythema over the glans penis after 7 days. Oral cyclosporine was stopped on the 10<sup>th</sup> day, as no new lesions were observed and perilesional erythema subsided. The patient was advised mouth rinsing with chlorhexidine solution 3 times daily. The lip erosions and oedema showed gradual improvement with a daily antiseptic dressing in 7-10 days. On day 15 of admission, the patient complained of difficulty in mouth opening, not associated with pain, and on examination, the previously active oral erosions had healed with synechiae formation at the bilateral labial commissures. The interincisor distance was measured to be 3.0 cm. The synechiae extended 4 mm and 2.5 mm from the labial commissures on the left and the right side, respectively. There was no evidence of secondary infection. Synechiolysis was done bilaterally after the local infiltration of 2% lignocaine. The synechiae were released surgically using scalpel blade number 15, and intraoperative haemostasis was obtained using two mosquito forceps applied on either side of the synechiae followed by coagulation by radiofrequency. Postoperatively, wound site dressing was done using mupirocin and paraffin gauze, and stay sutures were put on for the next 24 h [Figure 1], after which the patient was advised for active mouth opening exercises and frequent mupirocin ointment application to prevent re-adhesion. The inter-incisor distance measured on post-operative day

1 was 4.8 cm. The lesion improved without the recurrence of synechiae over 7–10 days and the patient was discharged. For the idiopathic seizure disorder, levetiracetam 500 mg twice daily was prescribed by neurology. A drug card was issued to the patient at the time of discharge to prevent further drug reactions by the suspected drug. There was no sign of recurrence of synechiae and the wound site had completely re-epithelialized with normal mouth opening, on follow-up after 4 weeks. Figure 2 shows the pre-operative image of the oral mucosa [Figure 2a-c] and oral mucosa on follow-up 4 weeks post-operative [Figure 2d-f].

In SJS, painful inflammation and ulceration of the mucosal surfaces occur in 87–100% of cases, with oral involvement in 71–100%.<sup>[1]</sup> Oral mucosa care in SJS includes frequent mouth rinse with an antiseptic and antifungal solution, lubrication of lips and crust removal. The occurrence of lip synechiae, as was found in our case, is uncommon and six cases of labial synechiae as sequelae of SJS/toxic epidermal necrolysis have been reported.<sup>[2-5]</sup> The majority of the cases with lip synechiae present to the oral surgeons, and management by surgical excision, and using carbon dioxide laser has been attempted previously.<sup>[2-5]</sup>

Our report aims to make dermatologists aware of this possible complication in cases of SJS with erosions involving the labial commissures and that it is amenable to surgical correction. Initiation of mouth opening exercises and adequate lubrication, early in the healing phase of the oral erosions, can help in the prevention of this complication.

#### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Nil.

## **Conflicts of interest**

There are no conflicts of interest.

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