Correspondence and Communications

A simple but effective way to protect the oral commissures during cleft surgery

Dear Sir,

Cleft surgery and more generally speaking intraoral surgery, can result in perioral soft tissue injuries, especially at the oral commissures, as the mouth is opened. In addition, instruments and sutures are inadvertently and repeatedly rubbed against the corners of the mouth due to limited access and visibility.

Abrasions, lacerations, and burns to the lip and corner of the mouth can be extensive enough to cause permanent skin and commissure scarring.1

Surgeons are aware of the potential for soft tissue injury and therefore of the importance of protecting the lip during the procedure.

Oral surgery textbooks highlight the importance of screening and replacing retractors and other instruments made sharp and irregular during previous surgeries.2,3 However, abrasions or burns of the lips can still occur as a result of the friction from suture material and instruments, often at the level of the oral commissures.

A number of strategies have been adopted in an attempt to reduce the incidence of accidental injury or skin irritation. In orthognathic surgery, the Angle Wider device is traditionally used to keep the mouth open and offer some protection to the lips. More recently, the Lip-Protector, a wound edge protector originally designed for minilaparotomy procedures, was also used for lip protection during orthognathic procedures.4

In cleft surgery, the choice of lip protecting options is limited by the presence of the mouth gag, which physically impedes the use of the abovementioned devices. Several solutions have been attempted including the topical application of Vaseline ointment on the lip and corners of the mouth. This can be impractical as the ointment tends to stick on instruments and sutures making the operative field difficult to navigate and ultimately inefficient. Steristrips have also been trialled, applied on the oral commissure to reduce the friction but they can peel away easily, especially as they inevitably become wet during the procedure.

In an attempt to solve this problem, we tested the DuoDERM® dressing (ConvaTec), a hydrocolloid dressing specifically designed to reduce the risk of skin breakdown due to friction.

The use of hydrocolloids is currently recommended in national and European guidelines for the management of pressure ulcers.5

There are a number of hydrocolloid dressings available on the market that are probably suitable, e.g. RepliCare® (Smith & Nephew, Inc.); Restore® (Hollister, Libertyville, IL); NuDerm® (Johnson & Johnson Medical); Comfeel® (Coloplast Sween, Inc, Marietta, GA); Hydrocol® (Dow Hickman, Sugar Land, TX); Cutinova® (Smith & Nephew); and Tegasorb® (3M, New York, NY).

We report our experience with the DuoDERM® dressing as it is the one currently in use in our trust.

The dressings are easy to use, mould and can be cut to shape to dress the oral commissures (Figure 1).

Some useful tips from our experience:

Cut the DuoDERM® dressing to obtain 2 patches in a shape of a small bracket. After the routine skin prep with Betadine, clean the skin with a saline-soaked swab and pat dry (The dressing doesn’t stick as well on dried betadine). Apply the mouth gag in the routine manner and open. If the dressing is applied first, opening the gag will displace it. Apply the dressing on the oral commissures by removing the “bottom” white release paper. Be careful to minimise finger contact with the adhesive surface and to avoid stretching. The dressing should not sit on the oral mucosa (again it will not stick as well) but rather, on the mucosa-skin border.

We used this method in 80 patients who underwent cleft surgeries such as cleft palate repair, vomer flap, buccinator flap, alveolar bone graft and pharyngoplasties from July 2019 to December 2019, and no lip injuries occurred.

Figure 1 Photograph of the DuoDERM® patches after application.
The use of DuoDERM® works well to protect the lips and, unlike other type of wound edge protectors, does not restrict the surgical field.

We believe that using a wound edge protector minimises the risk of lip injury during cleft and intraoral surgery thus making the procedure less stressful, more efficient and overall safer for the patient.

Declaration of Competing Interest

The authors have no conflicts of interests to declare.

Funding

None.

Ethics

None.

References


Nefer Fallico, Shakeel Rahman, Louisa Ferguson, Duncan Atherton, Norma Timoney South Thames Cleft Service, Guy’s and St Thomas’ Hospital, Westminster Bridge Road SE1 7EH London, United Kingdom

E-mail address: Nefer.fallico@nhs.net

Crown Copyright © 2020 Published by Elsevier Ltd on behalf of British Association of Plastic, Reconstructive and Aesthetic Surgeons. All rights reserved.

https://doi.org/10.1016/j.bjps.2020.03.015