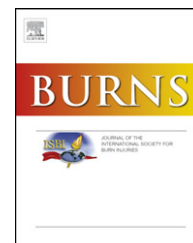


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## Letter to the Editor

### Fixation of ProSeal™ laryngeal mask airway in a child with facial burns

To the editor,

An eight-year-old female child was posted for skin grafting of chest and upper limbs. She was a victim of 45%, second degree skin burn over whole face, scalp, chest and both upper limbs. On examination she was 24 kg in weight. Cardiovascular and respiratory system revealed no abnormality. Airway examination revealed a mouth opening of 3 cm and she was Mallampatti class II airway with limited neck flexion. Her preoperative routine laboratory investigations, chest X-ray and ECG were normal. A 20 G intravenous cannula was secured in lower limb and baseline normal saline infusion was started. 5-lead electrocardiography equipment was applied to the lower abdomen. Pulse oximetry and non invasive blood pressure monitoring were applied on lower limbs. Facemask was applied after securing vaseline impregnated gauze around and beneath the mask and she was preoxygenated with 100% oxygen for 3 min. Anesthesia was induced with fentanyl 3 mcg kg<sup>-1</sup> and propofol 2.5 mg kg<sup>-1</sup>. A size 2 ProSeal™ laryngeal mask airway



**Fig. 1 – Fixation of PLMA using No. 1 Vicryl surgical suture by tightly encircling to PLMA and encircling the upper incisors.**

(PLMA) was inserted and fixed with No. 1 Vicryl surgical suture. The PLMA was first tightly fixed with 2 rounds of Vicryl and 2 surgical knots. Both free ends of suture then fixed in lateral grooves of upper incisors and 2 rounds was taken around incisors and tightened by 2 surgical knots (Fig. 1). Anesthesia was maintained on isoflurane in oxygen and nitrous oxide (30:70). Surgery lasted for 3 h and at the end of surgery suture was cut and PLMA was removed when the patient was fully awake. The same procedure and method of fixation of PLMA was repeated in same patient on 2nd operation 1 week later.

Fixation of airway device (tracheal tube or supraglottic airway) in patients with post burn raw area of face or blistering skin disorders is always a challenge. Adhesive tape used for securing airway device and intravenous catheters in these patients cause trauma and bleeding. Botts et al. [1] described interdental wire fixation of tracheal tube in burn patients but such interdental wiring of tracheal tube may cause torsion and total occlusion of airway distal to the fixation and cause life threatening event [2]. Jensen and Kealey [3] described encircling the upper incisors with heavy braided silk suture for tracheal tube. Modifications of tracheal tube [4] also been used for children with facial burns. Maxillary screw [5] has also been used for anchoring the dental wiring for tracheal tube fixation. No such technique is described for fixation of LMA's in facial burn patients. We here describe an almost similar technique to Jensen and Kealey [3] for securing the PLMA by tightly encircling the No. 1 Vicryl surgical suture and then encircling the upper incisors and fixing by surgical knot. We safely used this technique twice in same patient using PLMA as airway device. In patients with facial burn and raw area, who are undergoing surgical procedure other than the head and neck, this method of fixation of PLMA will avoid trauma, bleeding and also complications of interdental wire and maxillary screw.

### Conflict of interest statement

No conflict of interest (including financial and other relationship).

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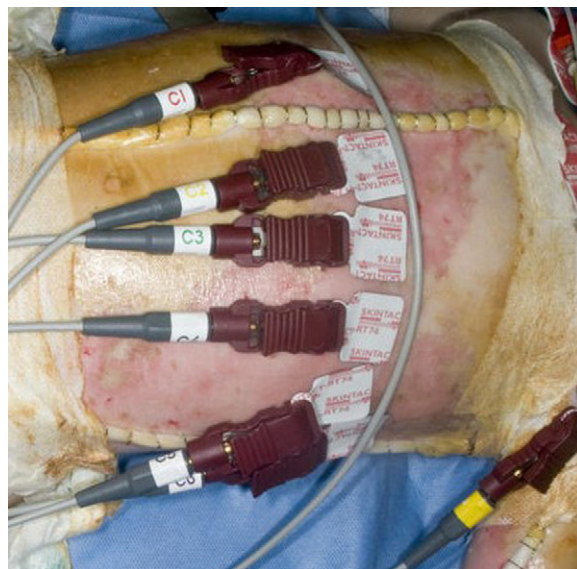
## Letter to the Editor

### An electrocardiogram for a patient with Biobrane® dressing

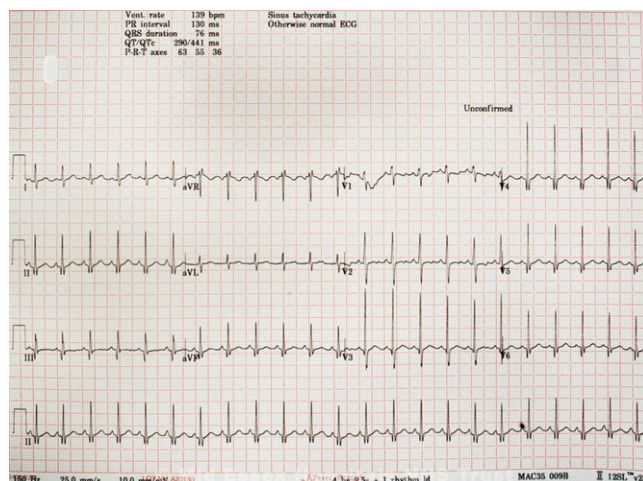
Biobrane® is a flexible biosynthetic dressing firmly adhere to wounds. Biobrane® has reduced the hospital stay, wound healing time and pain [1,2,3]. Therefore, it is widely used in pediatric partial-thickness scald burns.

We report an interesting situation which required performing an electrocardiogram (ECG or EKG) on a patient who had Biobrane® dressing done 48 h previously. The current case is that of a 26 month old boy who had scald burns of 25% total body surface area (TBSA). The patient had debridement of the confluent superficial partial thickness burns and dressing with Biobrane® within 24 h of the injury. The following day the child showed signs of cyanosis on being stressed i.e. crying. The child was assessed by the paediatricians who suggested performing an ECG. This posed a practical problem as the torso of the patient was involved in the burn and was dressed with Biobrane® recently.

We removed the outer secondary dressings and found that Biobrane was well adherent to the skin. We performed an ECG by attaching the Skintact® electrodes onto the Biobrane® itself (Fig. 1). These electrodes function without additional gel between the body and electrode and are routinely used for performing ECGs in most of the hospitals. Biobrane® contains



**Fig. 1 – Electrocardiogram for a burnt patient dressed with Biobrane®.**



**Fig. 2 – Electrocardiography of the child with Biobrane® dressing.**

silicone that conducts electricity. Thus a good quality (Electrocardiography) ECG was obtained without disrupting the Biobrane® dressing (Fig. 2). We thus conclude that when indicated, ECG could be performed successfully over a well adherent Biobrane® dressing. This information could be of potential use in managing other patients with Biobrane dressings in similar condition.

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