Intra-oral Plastic Pressure Dressing: A Technical Note

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Abstract Post-operative swelling in the maxillofacial region is a common finding, especially in the cheek region. There is abundance of soft tissue and lack of any anatomical barrier to inhibit the swelling in the cheek region. External pressure dressing is the most commonly followed norm along with steroids. This protocol usually is insufficient to counter the swelling. In our Technical note we are describing a technique of use of intra-oral plastic sheet pressure dressing along with the conventional treatment protocol. The use of intra-oral plastic sheet is a cheap, safe, readily available in the OR and effective method of compression dressing.

Keywords Pressure dressing · Buccal swelling · Post-operative swelling

A 35 year old female (Fig. 1) reported to us with the chief complaint of swelling in the right cheek after undergoing excision of a 5 year old 2×2 cm firm lesion intra-orally from her right cheek region 15 days. The histopathological report suggested pleomorphic adenoma. The clinical diagnosis of the presenting swelling was salivary collection secondary to surgery.

On examination a 4×5 cm swelling in relation to the right cheek was seen extending from the infraorbital region to the 1 cm above the lower border of the mandible; and from the corner of the mouth to 2 cm anterior to the tragus of the ear. The swelling was tender and soft in consistency. There was absence of movement in the upper lip. CT scans revealed features consistent with clear fluid in the clinical area. Hence, hematoma was ruled out. It was planned to drain the collection to treat the swelling as well as to decompress the upper buccal branch of facial nerve.

Under nasotracheal intubation preexisting sutured buccal mucosa was opened by removing five interrupted sutures and blunt dissection was carried out using mosquito forceps up to the buccal space to evacuate the collection. On reaching the buccal space a gush of saliva mixed with tinge of blood flowed out. On application of external pressure over the buccal mucosa about 30 ml of saliva was drained. A corrugated rubber drain was applied to the region. To avoid any further swelling in the region, constant pressure was required to be applied to the region. Since external pressure dressing alone wouldn't have served our purpose, a combination pressure from inside and outside the cheek was preferred [1–4].

An oval shaped plastic sheet was cut out of a saline bottle after chemically sterilizing it (Fig. 2). The oval sheet was placed intra-oral and its exact dimension was marked with a marker pen and tailor made according to site where pressure was to be applied. The borders of the sheet were smoothened using a heated instrument to avoid irritation of the buccal mucosa. The sheet was secured using 1-0 mer-silk suture (Fig. 3), using percutaneous horizontal mattress suture. Both ends were tied over a gauze piece on the cheek region (Fig. 4) as a tie-over bolus press down dressing. The gauze provided external pressure. The area adjacent to the gauze was moistened with betadine ointment to keep it

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Fig. 1 Frontal view

Fig. 2 Cut out plastic sheet from NS bottle

aseptic and to avoid skin necrosis. Dynaplast pressure dressing was applied externally (Fig. 5) to apply additional pressure over the region [5, 6].

The dressing was removed on the fourth post-operative days when the drainage of saliva from the corrugated rubber drain ceased out. The rubber drain was removed on the fifth post-operative. The swelling and tenderness subsided by the fifth post-operative day. The decompressed upper buccal nerve showed sign of recovery by the 30th post-operative day. The use of intra-oral plastic sheet is a cheap, safe, readily available in the OR and effective method of compression dressing.

Fig. 3 Cut out plastic sheet in situ

Fig. 4 Tie-over compression dressing

Fig. 5 External compression dressing

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