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CORRESPONDENCE

Using a plastic dental syringe for decompression and marsupialization of jaw cysts: A technical note



It has been suggested that the growth of cysts occurs by a combination of osmotic pressure and pressure resorption, coupled with release of prostaglandins and growth factors.¹ The purpose of decompression, by any method, is to change the environment and decrease the amount of interleukin- α that is released.¹ Decompression can be accomplished by making a small opening in the wall of the cyst and keeping it open with a drain of some kind. However, marsupialization has been described as converting the cyst into a pouch. (The word *marsupial* is derived from the Greek word for "pouch".¹) Thereby, marsupialization is a more definitive treatment for the cavity. By marsupialization, besides the decompression of the lesion, the cyst lining is exposed to the oral environment. Mandibular cysts are normally marsupialized into the oral cavity; by contrast, maxillary cysts can also be marsupialized into the maxillary sinus or nasal cavity, as well as the oral cavity.¹

Several different techniques have been described to keep the opening such as custom-made stents,² laboratory-made ventilation tube,³ and modified intubation tubes.⁴ Tolstunov⁵ described a catheter that should satisfy at least the following criteria: (1) have a design that prevents it from falling into the bone cavity or coming out from it at the end of the procedure; (2) be small enough and not interfere with daily mastication; (3) be fixated easily to the soft tissue around it with sutures; (4) provide easy daily cleaning of the cystic cavity through its opening by the patient or staff; and (5) be hygienic and not accumulate food particles (should not be porous) over the time of its function.⁵

This technical note describes a method that involves using a plastic dental syringe to decompress large cystic lesions of the jaws (Fig. 1). Certain parts of a dental syringe such as barrel and needle cover have been used in our department for this purpose because it has several

advantages over other methods. Using a bur, needle cover, and barrel parts of a plastic dental syringe can be altered in length to suit the size of the cavity. Flanges of the barrel part can also be altered in width to be small enough and not to interfere with daily mastication. A few small holes can be made by a bur in order to suture them to the neighboring mucosa. Thus, fixation by suturing them to the neighboring mucosa becomes reliable (Fig. 1). In addition, plastic dental syringes are relatively cheap and readily available in operating theaters, and allow for regular irrigation of the cavity by the patient. Their use could eliminate the need for a laboratory or a technician to construct a prefabricated acrylic obturator, or—if preferred—to replace it by a prefabricated acrylic obturator after converting the cyst into a pouch.



Figure 1 The barrel part of a plastic dental syringe used to create a stoma in a large dentigerous cyst.

Conflicts of interest

The authors have no conflicts of interest relevant to this article.

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