A Soft, Flexible Stent/Bung for Marsupialisation

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Abstract A soft flexible stent or bung for marsupialisation using putty elastomeric impression material rather than an acrylic bung.

Keywords Marsupialisation · Stent/bung · Cold cure acrylic bung/stent · Putty rubber base impression material · Cyst

Marsupialisation is a well established procedure for the treatment of cysts [1–4]. In marsupialisation of large cystic cavities it is imperative that the opening of the cyst cavity is kept patent during the decompression period. This is usually done using a bung/stent. This bung/stent can be made of a variety of materials including cold cure acrylic, heat cure acrylic [3], nasopharyngeal airways, customized stents [1] attached to the prosthesis and so on [2, 3].

These however have many disadvantages such as:

- In cold cure acrylic bung/stent, setting is exothermic in nature and thus can potentially cause tissue necrosis.
- It is hard and therefore uncomfortable to the patient. This reduces compliance in wearing the stent/bung during the course of the treatment.
- It requires special instruments like a drill to trim and adjust.
- It requires a lab to customize some of the prosthesis.
- The material should be cured within 15 min to avoid porosity [2].

We describe a technique of using rubber base impression material as a bung/stent to keep the opening patent. After marsupialisation is done as normal, the cystic cavity is initially packed with a whitehead varnish pack [2] (Figs. 1, 2, 3).

The wound is allowed to heal for 3–5 days and then the pack is removed. Putty rubber base impression material is mixed with catalyst and a tongue like projection is made. This projection is gently inserted into the cyst cavity and the rest of the putty material is molded in the vestibular region. Care is taken to check that there is no interference in the bite and also that the vestibular projection is larger than the cyst opening to prevent the putty falling into the cystic cavity. The material is then allowed to set and then taken out of the oral cavity and trimmed as needed using a scissors or BP blade. The patient can even trim the rubber bung by himself in case of any overextension. The advantages in using this material include:

1. No heat during setting and thereby prevents possible tissue damage.
2. As the material is made of rubber base it is flexible and soft and therefore easier to place and remove in patients who have hard acrylic bungs. This leads to better patient compliance in wearing the bung/stent.
3. It can be trimmed easily using a scissors or a BP knife.
4. Can be done at the chair side unlike heat cure acrylic bungs which require a lab procedure.
5. Long term use does not create any problem. It is quick to fabricate and cheap to make.

In an informal survey of patients in our unit who have had both acrylic and putty impression material bungs, all of them prefer the putty impression material bung.

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Fig. 1 Rubber base impression material bung shown with tongue like projection

Fig. 3 Rubber base bung in situ

Fig. 2 Initial cystic cavity ready for bung placement

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