Breathing straws

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Abstract

Following nasal, septal or endoscopic surgery, it is common practice to insert nasal packs in both nasal cavities to achieve haemostasis, if there has been any bleeding at the end of the procedure. However, such packs make it difficult for patients to breathe, mainly in the first post-operative night which leads to discomfort and poor sleep. To enable patients to breathe better with nasal packs in situ, we describe a simple technique using trimmed straws and wrapped Netcell[®] packs for post-operative care following septal surgery, rhinoplasty and endoscopic sinus surgery. These packs also assist suction of any blood or mucous from the post-nasal space.

Key words: Nasal Cavity; Otorhinolaryngologic Surgical Procedures; Nasal Airway

Technique

Two straws with flexible top ends are used. These are trimmed at the bottom end. Figure 1 shows the trimmed straws along with two wrapped Netcell® packs (Network Medical Products Ltd. Ripon, North Yorkshire, UK). The straws are then inserted along the floor of the nasal cavities, slipped over a rigid suction tube, under endoscopic vision. They are placed to run all the way back to the postnasal space, but without touching the posterior pharyngeal wall (Figure 2). These straws can also assist in suctioning the nasopharynx and oropharynx, using fine bore suction catheters introduced via the straws.

Two Netcell packs wrapped in polythene sheaths are then inserted above the straws. Further suctioning can be performed after insertion of the Netcell® packs if necessary.

Figure 3 shows the ends of the straws, above which lie the Netcell packs, their strings taped to the dorsum of the nose, along with a small bolster pack taped in place below the nostrils.

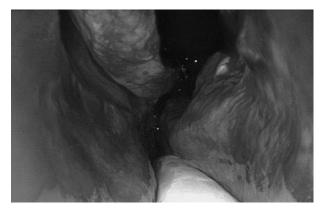


Fig. 2

The straw lying along the floor of the left nostril.



 $\label{eq:Fig.1} Fig.~1$ The trimmed straws along with the wrapped Netcell $^{\circledR}$ packs.



Fig. 3 The ends of the straws, above which lie the Netcell® packs and their strings taped to the dorsum of the nose.

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Discussion

The main advantage of using such breathing straws is that the patients' ability to breathe is improved, even with the packs in situ. The other advantage, as mentioned above, is that the post-nasal space can be suctioned through the straws, using fine suction catheters. The breathing straws are removed the next day, along with the packs.

In our experience, patients do not complain of any discomfort or distress due to the breathing straws – in fact, they find breathing through the straws much easier, even with the packs in situ. There is no danger that these straws will slip back into the oropharynx, as they have the Netcell[®] packs on top and supporting them. So far, we have encountered no complications with this method (such as the straws slipping backwards or being sneezed out).

The senior authors D Simmen and HR Brinner have used these straws for more than eight years, without any complications. We acknowledge that there are several commercially available packs with integrated breathing channels, for example the Rapid Rhino® packs (ArthroCare UK Ltd, Harrogate, North Yorkshire, England). However, the breathing straws used in our technique are very cheap compared with such commercially available packs. Bendable straws are also easily available, and are used millions of times every day in the food industry, without any safety restrictions.

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