Cotton Dental Rolls for Effective and Cost-Efficient Hemostasis

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Continuous visualization of the surgical field is a key component of good surgical technique. Removing blood from the field ensures that the surgical dissection remains in the appropriate plane and decreases the risk for inadvertent injury to vital structures. Maintaining a clear surgical field also allows for identification of individual bleeding vessels so that they may be cauterized precisely or ligated. This decreases the need for excessive thermal damage. Standard 6” cotton-tipped swabs may be used to more precisely absorb blood from the surgical field, but in all but the most limited of procedures, these small swabs quickly become saturated and ineffective. Two alternatives for precise hemostasis include cotton dental rolls1 and large cotton rectal swabs (Figure 1). The dental roll can be used by clamping it with a hemostat or placing it at the end of a cotton swab and can even be used to retract tissues within the surgical field (Figures 2 and 3).2

Regular 6” cotton swabs, at a cost of $0.01 per swab, absorb 0.18 g of fluid when saturated. Large rectal swabs, at a cost of $0.10 per swab, absorb 2.87 g of fluid when saturated. This is roughly 16 times the volume of the 6” swab. Dental rolls cost $0.01 each and absorb 2.67 g of fluid, 15 times that of the 6” cotton swab. Analysis of the cost per equivalent absorption shows that the dental roll is superior to 6” cotton swabs (15 × cost) or large

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Figure 1. (left to right) Cotton dental roll, cotton rectal swab, and standard 6” cotton-tipped applicator swab.

Figure 2. Cotton dental roll grasped using a curved hemostat.
rectal swabs (9 × cost) to absorb an equal amount of blood in the surgical field.

Thus, cotton dental rolls are an efficient and cost-effective alternative for maintaining continuous visualization of the surgical field during dermatologic surgery.

References


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