

SafeGauze[®] HemoStat[™]

Topical Hemostatic Dressing



Control Dental Surgery Bleeding with the Right Hemostatic Dressing

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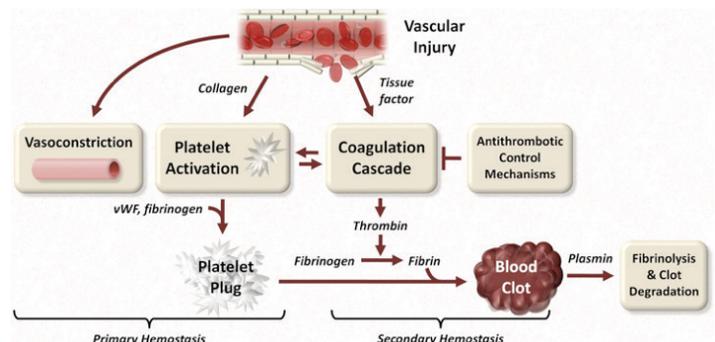
You can use pressure to control most bleeding that occurs during dental surgery. However, in situations where pressure doesn't yield satisfactory results, you turn to hemostatic agents. These agents help to control bleeding either mechanically or by augmenting the coagulation cascade. In this article, we'll review hemostasis, take a look at the history of hemostatic agents, and provide detailed information about a new hemostatic dressing.

How Hemostasis Works

Natural hemostasis is the body's normal physiological response to control, prevent, and stop bleeding. (See Major Components of Hemostasis.) It can be primary or secondary. In primary hemostasis, local vascular contraction reduces blood flow to the injury site and platelets form plugs. Secondary hemostasis consists of the cascade of coagulation. These two processes happen simultaneously and are mechanistically intertwined. Various factors and inhibitors interact to clot plasma. Natural hemostasis can be difficult to achieve when the body is under stress, so other methods must be used to stimulate it. To plan for hemostatic needs, collect a complete medical history from each patient. (See *Know Before You Cut.*)



Major Components of Hemostasis



Stop Dental Surgery Bleeding

Know Before You Cut

The best way to stop bleeding is to know your patients' medical histories, especially their current medications. Specifically, you want to know if they're taking any anticoagulants or antiplatelet drugs. Anticoagulants—including heparin, warfarin (Coumadin), rivaroxaban (Xarelto), and dabigatran (Pradaxa)—slow down the body's clot-making process. Antiplatelet drugs—including aspirin and clopidogrel (Plavix)—prevent platelets from clumping together to form a clot.

Antiplatelet drugs including aspirin and clopidogrel (Plavix) - prevent platelets from clumping together to form a clot.

When you know what to expect, you can take steps to prevent and control bleeding and know how to treat it when it occurs.

Hemostatic Agents—The History

Hemostatic agents (hemostats) are developed specifically to stimulate both primary and secondary hemostasis pathways to reduce the risk of

hemorrhaging in clinical and emergency settings. They include electrocautery, soft-tissue lasers, and sutures. Gauze (hemostatic wound dressing) is frequently used often in combination in efforts to control bleeding.

Modern hemostats agents, can be classified as as topical hemostats, sealants and adhesives. These agents work in conjunction with the body to control bleeding by:

- 1 *Physically obstructing the outflow of blood in the wound.*
- 2 *Accelerating clotting reactions.*
- 3 *Providing a matrix for increased platelet interactions.*

The result is stronger fibrin clot formation and binding and sealing of vascular injuries. (See Hemostat classification.)

TOPICAL HEMOSTATS:

Mechanical Hemostats

- Collagen-based
- Oxidized regenerated cellulose (ORC)-based
- Gelatin-based
- Polysaccharide-based

Active Hemostats

- Thrombin-based

Flowable Hemostats

- Combination topical hemostats

ADHESIVE AND TISSUE SEALING AGENTS

Natural Tissue Sealant

- Fibrin Sealant
- Other natural sealant (albumin- and collagen-based)

Synthetic Tissue Sealant

- Cyanoacrylate-based
- Other synthetic tissue sealant (polyethylene glycol and others)

Adhesion Barrier Products

IDEAL HEMOSTATIC DRESSINGS

When choosing a hemostatic dressing, you want to look for certain characteristics to ensure it will do the job you need it to do and that it's safe for your patients. It should:

- Be cleared for use by the Food and Drug Administration (FDA) or other Agencies
- Control arterial and/or venous bleeding in limited time in the presence hemostats agents
- Not be toxic
- Have no adverse effects
- Not cause pain
- Be ready to use
- Be safe to use with no risk of injury
- Not require mixing or pre-application preparation
- Be flexible to accommodate different wound configurations
- Be inexpensive and cost-effective

NOT YOUR FATHER'S GAUZE

Medicom's SafeGauze® HemoStat™ Topical Hemostatic Dressing meets the following requirements that you'll need in a hemostatic dressing. And don't be fooled by the name—it's not ordinary gauze. (See Gauze vs. SafeGauze HemoStat.)

Gauze vs. SafeGauze HemoStat

Ordinary gauze:

- Performs like a scab to prevent bleeding from a wound
- Requires direct pressure, gauze saturation, and drying

SafeGauze HemoStat:

- Expands rapidly in contact with moist oral mucosa
- Creates a "plug" that adheres to the wound
- Converts to gelatinous mass

Stop Dental Surgery Bleeding

This sterile fabric is prepared by the chemical treatment of regenerated cellulose and can be used in the control of control bleeding during extractions, periodontal surgery, and other selected procedures. Regenerated cellulose is a polymer. It's a proven and effective hemostat that works naturally to help to control in blood coagulation.

When SafeGauze Hemostat comes in contact with blood or exudates, it quickly transforms into a gelatinous mass, which fills wound voids, seals capillary ends, and thereby help to control bleeding. It is effective in immediate hemostasis, protecting wound site and accelerating healing for trauma and post operational wound.



SafeGauze HemoStat is:

- Safe and effective
- Ideal for use with cuts, open wounds, extractions, periodontal surgery, implant procedures and other selected procedures, when combine with other hemostatic agents
- Easy to use
- 100% from biocompatible regenerated cellulose
- Not animal-based like some other products
- Free of chemical additives
- Adhere to the wound site and form a barrier
- Quickly transformed to gelatinous mass
- A natural aid to control bleeding
- Water soluble (excess material can be removed quickly)
- Dissolves in a few days
- Sterile

In addition to its hemostatic properties, SafeGauze Hemostat can also forms a barrier, protecting the wound, blocking the microbes out, which reduce the risk of infection. The oxidized regenerated cellulose used to create SafeGauze Hemostat has pH neutral close to 7.0.

Protect a wound from irritation as the dressing adheres well to the wound so one could fill a socket with gelatinous mass (Figure 1) of SafeGauze Hemostat over the socket to protect from irritation and pain (Figure 2). Can be used as a wound dressing in extraction sites and may be used as a wound dressing for the temporary management of oral surgical wounds, such as operative, postoperative and traumatic injuries.

Be Prepared

Bleeding is a fact of life in dentistry, but when you're prepared with a thorough medical history of your patients and the right products at your side, you can prevent and control bleeding easily and quickly.



Figure 1.



Figure 2.