

What Do I Do with this Hemostatic Gauze?

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Questions:

- What does the hemorrhage control evidence-based guideline say about hemostatic gauze?
- How do I use it properly?



ACS Hemorrhage Control EBG

SPECIAL CONTRIBUTION

AN EVIDENCE-BASED PREHOSPITAL GUIDELINE FOR EXTERNAL HEMORRHAGE CONTROL: AMERICAN COLLEGE OF SURGEONS COMMITTEE ON TRAUMA

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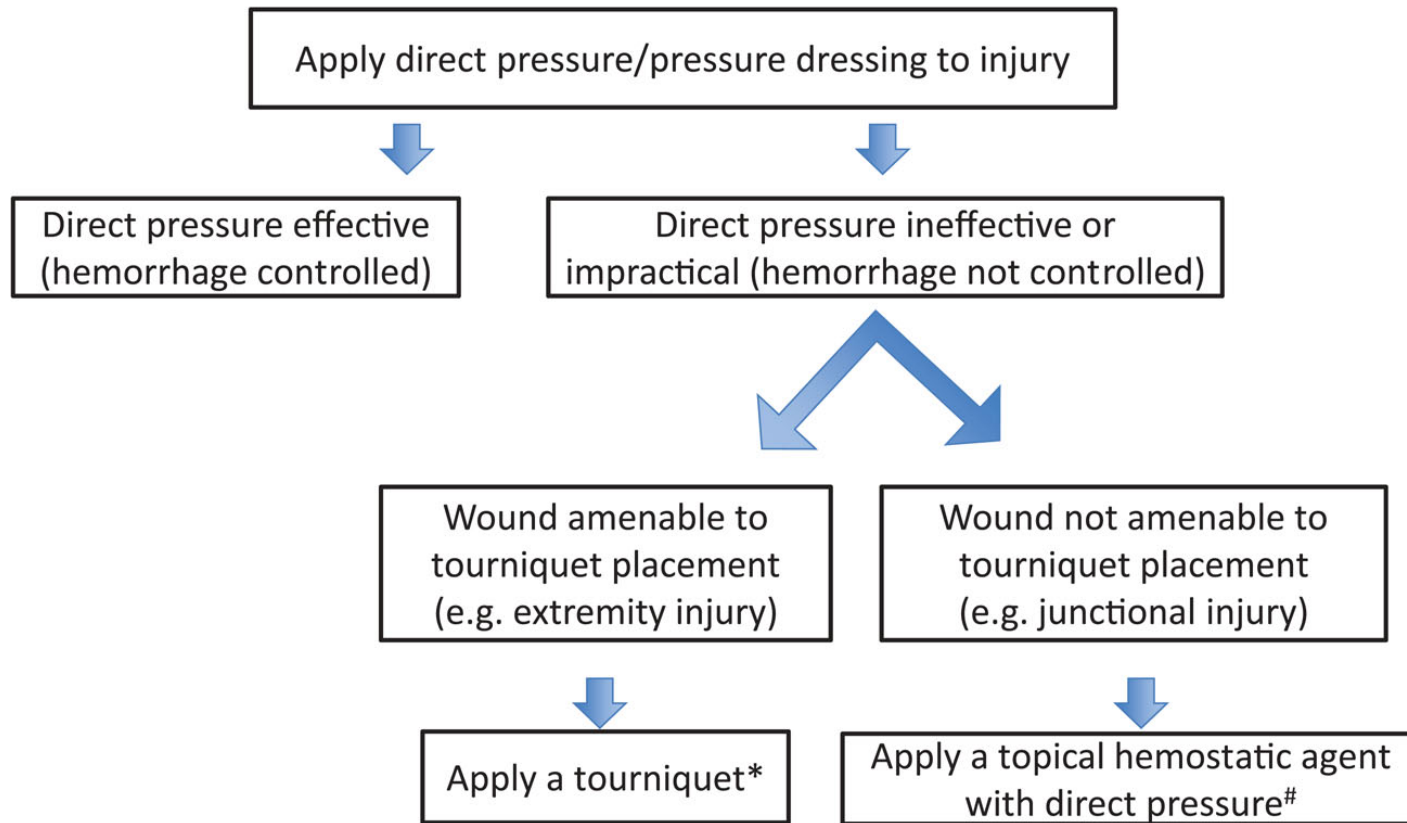


Prehospital Emerg Care 2014;18:163



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Prehospital External Hemorrhage Control Protocol



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Topical Hemostatic Agents

Recommendation 1: We suggest the use of topical hemostatic agents, in combination with direct pressure, for the control of significant hemorrhage in the prehospital setting in anatomic areas where tourniquets cannot be applied and where sustained direct pressure alone is ineffective or impractical.

Strength of Recommendation: Weak

Quality of Evidence: Low

Remarks: While the evidence was low, there are consistent data from animal models, suggesting reduced hemorrhage with these agents compared to standard gauze and the committee felt that junctional hemorrhage and torso wounds may benefit from the combination of direct pressure and hemostatic dressings.

Recommendation 2: We suggest that topical hemostatic agents be delivered in a gauze format that supports wound packing.

Strength of Recommendation: Weak

Quality of Evidence: Low

Remarks: This recommendation was based on the military experience and the animal studies suggesting that products that allow packing of the wound have superior hemorrhage control.



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Well, That's Nice, But No One Taught Me How to Pack a Wound!



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Well, That's Nice, But No One Taught Me
How to Pack a Wound!

Well, It's Time to Learn!



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Step 1: Stop the Bleeding! *Now!*

Direct Pressure:

Hand

Gauze

Rag

Knee

Whatever it takes!



Now: Take a breath and get out your supplies



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Step 2: Put Your Finger/Hand in the Wound and Push Hard

Gloves recommended!

Mask/Eye protection: smart!



Step 3: Pack the Gauze in...Keep Packing

Pack it in around your finger...tight!

Keep Packing

Keep Packing

Keep Packing

Keep Packing...till no more gauze goes in.

Then:



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Step 3: Pack the Gauze in...Keep Packing

Pack it in around your finger...tight!

Keep Packing

Keep Packing

Keep Packing

Keep Packing...till no more gauze goes in.

Then:

Keep Packing

Be Brave...

Keep Packing

Till you *really* can't cram anymore in there!



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Step 4: Apply Very Firm Pressure for 3 minutes

Use the rest of the roll as a lumpy bolster to help apply pressure



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Step 5: Is it Still Bleeding?

If no: Sweet!

Start rolling to the trauma center.

Put some IVs in.

Splint/immobilize area, if possible.



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If no: Sweet!

Start rolling to the trauma center.

Put some IVs in.

Splint/immobilize area, if possible.

If yes: Packing soaked and oozing

Pack some more, if you can.

Put your knee back on it and haul ass to the surgeon!



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By the Way, Do I Need Expensive Hemostatic Gauze?

Maybe not...



By the Way, Do I Need Expensive Hemostatic Gauze?

Comparison of ChitoFlex[®], CELOX[™], and QuikClot[®] in control of hemorrhage.

Devlin J, et al. *J Emerg Med* 2011;41(3):237

CONCLUSION:

In our study of limited-access extremity bleeding, ChitoFlex[®] performed equally well in mitigating blood loss and promoting survival. The ChitoFlex[®] dressing is an equally effective alternative to currently available hemostatic agents.

However, no agents were superior to standard gauze in our model of limited access.



By the Way, Do I Need Expensive Hemostatic Gauze?

Advanced hemostatic dressings are not superior to gauze for care under fire scenarios.

Watters, et al. *J Trauma* 2011 70(6):1413



CONCLUSIONS:

Advanced hemostatic dressings do not perform better than conventional gauze in an injury and application model similar to a care under fire scenario.



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Wound Packing Training Video

<https://youtu.be/IQmsYOid7xY>



The Future

- Wound packing incorporated into initial and ongoing paramedic training
- Wound packing included in NREMT required skill set



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