

## Wound Packing for Penetrating Junctional and Extremity Trauma (≥ PL1)

### Clinical Indications:

1. Uncontrolled hemorrhage for penetrating junctional and extremity trauma.

### Contraindications:

1. None

### Procedure:

1. Stop the bleeding. Now! Immediately apply direct pressure to the wound, using gauze or clean cloth to slow or stop the hemorrhage-until you have time to get out your wound packing supplies. Place your gloved fingers-with or without a dressing-into the wound to apply initial pressure to the target area (with your target being the vein, artery or both) and compress the source of bleeding. Keep in mind that the body's anatomy presents with major vessels running close to bones. So, whenever possible, utilize a bone to assist with vessel (i.e., bleeding) control. This will also give you an idea of which direction the wound travels and you can insert the gauze accordingly.
2. Pack the wound with gauze or gauze with an impregnated hemostatic agent. Tightly! Your goal is to completely and tightly pack the wound cavity to stop hemorrhage. Begin packing the gauze into the wound with your finger, while simultaneously maintaining pressure on the wound. When no more gauze can be packed inside the wound, hold direct pressure on the wound for 3 minutes. It's critical that the gauze be packed as deeply into the wound as possible to put the gauze into direct contact with the bleeding vessel. By doing so, you're simultaneously putting direct pressure onto the bleeding vessel and allowing the hemostatic agent to do work its magic.
3. Keep packing! The key to successful wound packing is that the wound be very tightly packed, applying as much pressure as possible to the bleeding vessel. This pressure against the vessel is the most important component of hemorrhage control. This explains why plain gauze (without an impregnated hemostatic agent), when tightly packed, is also quite effective.
4. Apply very firm pressure to the packed wound for 3 minutes. This step pushes the packing firmly against the bleeding vessel and aids in clotting.
5. Secure a snug pressure dressing and transport. After applying pressure for 3 minutes, place a snug pressure dressing over the wound. You may consider splinting or immobilizing the area, if possible because movement during transport can dislodge the packing and allow hemorrhage to restart.
6. Should the bleeding continue, hemostatic gauze manufacturers recommend removal of the original packing and repacking with fresh gauze. The rationale for this is that they assume it wasn't packed properly the first time, or perhaps the packing didn't quite get to the bleeding vessel.
7. Prior to repacking, another option is to pack more gauze into the wound, if possible. If no further packing is possible, you must decide whether to remove the gauze and start over or simply apply as much direct pressure to the wound as possible and get the patient to a trauma center quickly. This decision should be made during transport; transport shouldn't be delayed for extensive packing and repacking of the wound.
8. Apply a tight pressure dressing to the packed wound. Once the bleeding is controlled, consider splinting or immobilizing the area to avoid dislodging the packing during transport.
9. Monitor wounds and/or dressing throughout transport for bleeding.
10. Wound edges should be cleared of blood.
11. Beware of the *trickle* of blood which may lead to slow exsanguination.
12. Document the wound and assessing in ePCR.