A Case Study Demonstrating the Utility of TRAUMAGEL® in Emergency Hemorrhagic Trauma Setting

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BACKGROUND AND PURPOSE

- Hemorrhage is the leading cause of preventable trauma-related deaths.
- Half of these deaths occur before patients reach definitive care.
- Traditional hemostatic methods have limitations depending on wound type and location.
- Tourniquets can cause tissue trauma, pain, vascular occlusion, and nerve injury.
- Emergency Medical Services (EMS) often combine several hemostatic approaches.
- We present a case with severe bleeding and soft tissue trauma managed with a tourniquet and TRAUMAGEL (referred hereon as Traumagel).

CASE DESCRIPTION

- A 38-year-old male presented to the ER following an industrial accident with a 12 x 18 cm wound and complete transection of the bicep muscle.
- With significant bleeding from tissue and muscular injury, the wound was difficult to pack with standard gauze.
- Tourniquet was applied proximal to the injury site, with incomplete arrest of bleeding.
- Next, Traumagel was applied and pressure maintained with resultant hemostasis, allowing for tourniquet removal.
- With sustained hemostasis, the patient was transferred to the operating room for repair of soft tissue/biceps injury without major vascular injury identified.

TRAUMAGEL

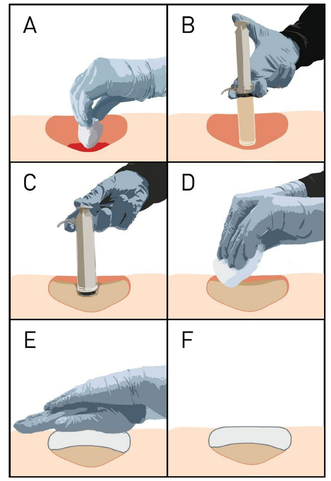
Traumagel is a single-use, hemostatic gel for temporary external use only. It is viscous, opaque, and tan in color and supplied as an individually pouched 30 mL hemostatic gel syringe.

* Not the actual patient

TRAUMAGEL USE

1. Identify source of bleeding and clear as much blood as possible.
2. Insert the applicator tip deep into the wound and quickly expel all contents.
3. Fully pack gauze into the wound opening atop the applied Traumagel and apply moderate palm compression (hand over hand).
4. Continue compression for three minutes or until hemostasis is achieved.
5. Traumagel must be removed within 24 hours of application with wound irrigation.

TRAUMAGEL USE ILLUSTRATION



CONCLUSIONS

- Traumagel's application was rapid, allowing for hemostasis in an irregular complex wound.
- Durable hemostasis facilitated stabilization for transfer and definitive surgical repair.
- Tourniquet was safely removed without rebleeding or added complications.
- Traumagel may be incorporated as an effective hemostatic adjunct in difficult bleeding scenarios.

CONFLICT OF INTEREST STATEMENT

TC is an employee of Cresilon Inc. Authors DV, CS and JB, report no conflicts of interest with this work and declare that they have no known competing financial or personal interests that could have appeared to influence the work reported here. PG is a paid speaker and consultant for Zimmer Biomet and MedExpert device companies. There is no direct conflict of interest with this current work.