

UC Irvine

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

Work for Idle Hands: A Simulation Model for Nail Bed Injury and Avulsion Repair

Permalink

<https://escholarship.org/uc/item/62j4q2db>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 23(4.1)

ISSN

1936-900X

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Publication Date

2022

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“Very Effective” (7). Twenty emergency medicine residents completed the post-simulation survey (74% response rate). For 40% of the residents, this was the first time using the c-arm. The simulation was quite effective at familiarizing residents to a c-arm with a mean score of 5.9 (SD=0.93), general fracture identification (4.9, SD=1.8) and reduction technique (5.1, SD=1.2), however it was even more effective at teaching those skills fluoroscopically (6.1, SD=1.1 and 5.7, SD=1.5, respectively).

Impact/Effectiveness: This innovation utilized materials found in many emergency departments and nearby communities and created low-cost, mid-fidelity fracture simulations in a non-clinical setting. This approach allows clinical trainees to utilize the equipment necessary for efficient and successful fluoroscopically-guided fracture identification and reduction.



Image 1.



Image 2.

29 Work for Idle Hands: A Simulation Model for Nail Bed Injury and Avulsion Repair

Rebecca Kreston

Learning Objectives: Wounds of the fingernail bed are a frequent injury encountered in the emergency department however residents often learn techniques for repair at the bedside. We aimed to develop and evaluate an economical and accessible simulation model of nail bed repair that could be used during online lecturing.

Introduction: Hand and fingertip trauma account for millions of visits to the emergency department annually. Nail bed injuries, including avulsions or unstable nails, are particularly common, however, there are limited opportunities for supervised practice and mastery of nail bed avulsion repair. We developed an economical and accessible simulation model to allow for practice of nail bed avulsion

repair during remote lecturing in the early days of the Covid-19 pandemic.

Curricular Design: The model consists of a halved hotdog with an acrylic nail embedded into and glued using nail glue at the terminal rounded end. Pressure was applied to the distal acrylic nail, tearing the hotdog at the insertion site of the nail, creating a horizontal nail bed laceration consistent with a nail bed avulsion injury. Red food coloring was used to mimic bleeding from a nail avulsion. The cost was approximately \$0.20 per model. Models and suture material were available for residents to pick up at the hospital prior to the online conference.

Impact/Effectiveness: The model was tested with thirty-four emergency medicine residents during an online conference and simulation session performed over Zoom; the ultimate goal was to reapproximate the nail in good anatomical position with appropriately placed absorbable sutures. A voluntary survey was available for residents which yielded highly positive feedback with survey results confirming that the model provided valuable education.



Image 1.

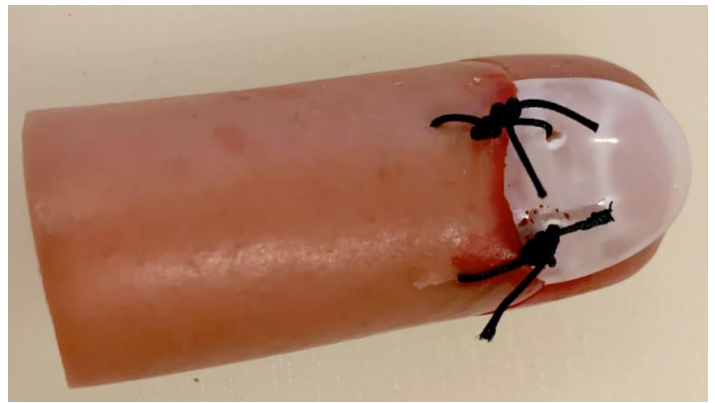


Image 2.

30 A day in the life of an emergency department (ED) patient: In-situ ED patient experience simulation for emergency medicine interns

Lynn McGowan, Amber Billet, Barbara Stahlman

Learning Objectives: The purpose of this educational innovation was to examine first year emergency medicine resident (EM-1) perspectives on the ED patient experience and examine how EM-1 empathy may change after experiencing a simulated ED encounter

Introduction/Background: Empathy is an essential trait for compassionate physicians and the importance of a positive patient experience in the emergency department (ED) is being increasingly emphasized. Currently, there is no best practice guidelines as to how to educate emergency medicine residents about patient experience.

Curricular Design: During the first week of EM-1 orientation, 12 residents at a community academic emergency medicine residency program consented to serve the role of patient, family member or observer. In groups of three, EM-1s navigated through four simulated ED encounters in their assigned role (left arm weakness, suicidal ideation, dyspnea, eye pain). Those role-playing as patient or family received a script based on chief complaint to utilize during the ED encounter. EM-1s individually completed a pre- and post-simulation written activity in which they listed all the tasks they believed the patient would encounter. Task totals of pre- and post-activity lists were compared using paired t-test ($\alpha=0.05$). A debriefing session was conducted immediately after the simulation to obtain qualitative feedback. The entire activity took 2 hours (5 minute introduction, 15 minute pre-