

THE CLINICAL PROBLEM

- Trauma is a leading cause of mortality in both military and civilian populations
- Tension pneumothorax (TP) represents a mixture of respired gases
- Rapid decompression of TP, via needle thoracostomy (NT), is a lifesaving maneuver
- Current guidelines recommend operators utilize auditory cues for a “gush of air” in an austere, loud prehospital environment which is often impossible
- It remains difficult for field providers to rapidly confirm therapeutic decompression in the field

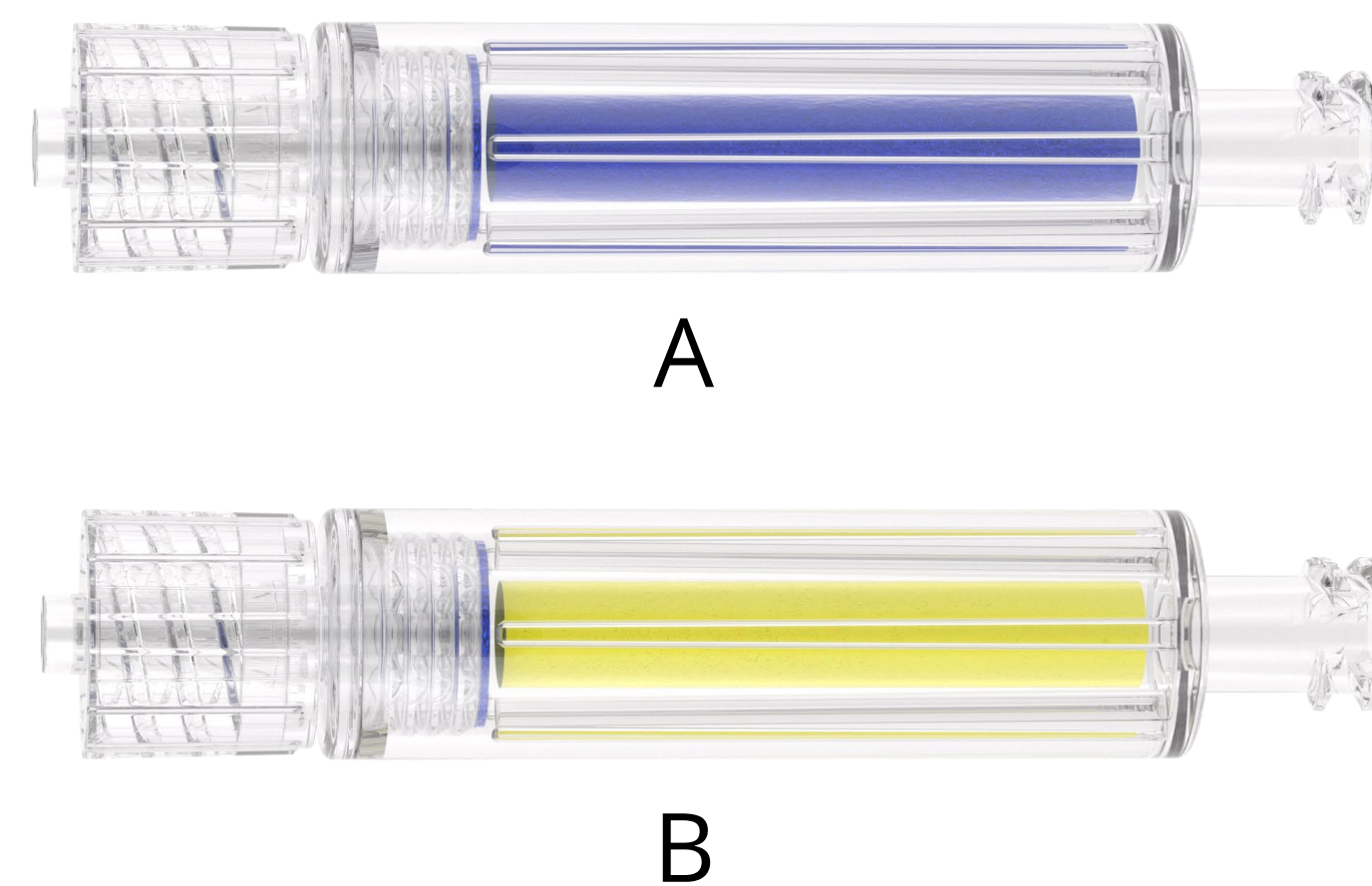


Figure 2: The Pneumeric Capnospot device transitions from a dark purple color to a bright yellow color when CO₂ is detected. A) Colorimetric paper is Purple in ambient air (CO₂ ~0.10%) B) Colorimetric paper turns bright Yellow when exposed to expired air (CO₂ > 3.0%)

OUR SOLUTION

- Convincing Animal and Human study data
- Small, lightweight, and portable
- Objective confirmation of success or failure
- Earlier detection than vital sign changes
- Compatible with existing luer-lock devices
- Reduces number of procedures
- Color change is visible in low light
- Box of 6 individual products
- Product weighs five (5) grams each



Figure 1: Clinical photograph from a civilian trauma center showing multiple needle decompressions in both the anterior and the lateral locations. Note that two of the needles in the anterior site have been inserted at locations medial to the midclavicular line.

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