Medical Tube Securing Device

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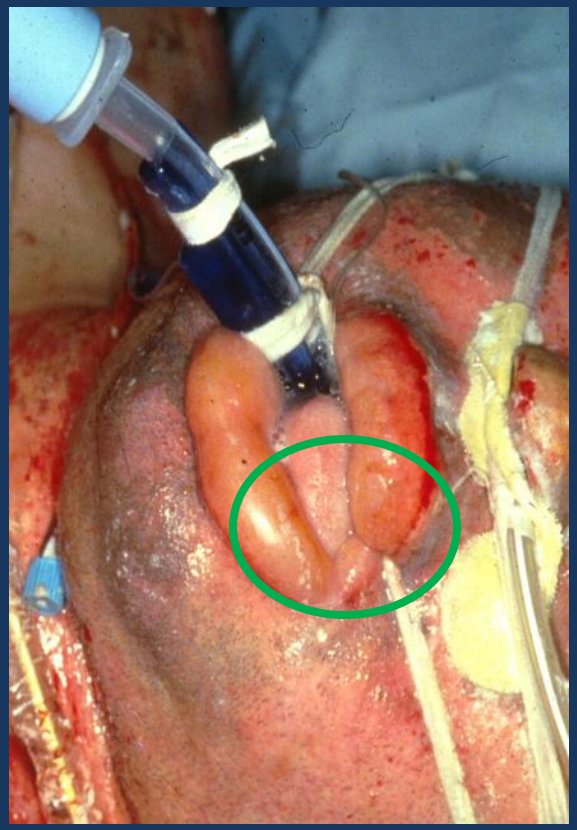
Background

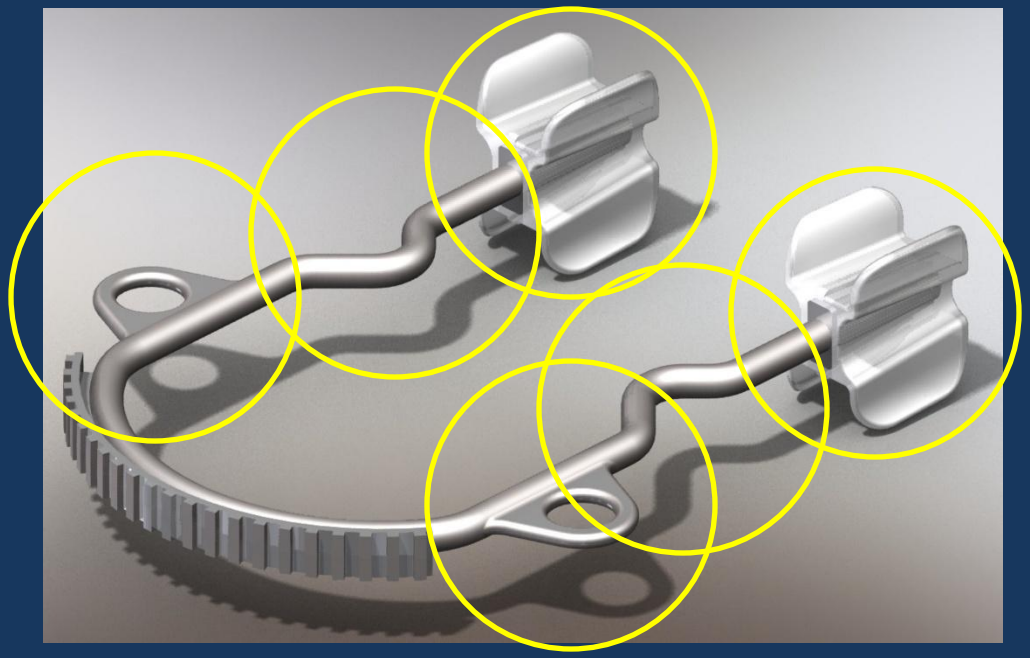
- 8 years in U.S. Army
- 3 years as Respiratory Therapist in Pulmonary Studies Division of U.S. Army Burn Center
  - Only Burn Center within Department of Defense
  - Average 300 Admissions annually
- Problem posed by current standard of care
  - Problem identified in burn patients (military and civilian) at our center
- Device designed to address problems outlined with standard of care in our center

- Current standard
  - In place since early 1990's
  - Bite block tied to tube, then tied around patient's head to secure
  - Silicone gel sheets placed under ties to pad
    - Added in 2004



- Problems identified with current standard
  - Destruction of soft tissue around mouth
  - Loss of patient teeth

Solution



- Blocks moved to back of mouth
  - Utilizes 8 molars as opposed to 4 incisors
- Framework to attach tube designed to avoid soft tissue of mouth/lips
- Attachment points moved forward of mouth
  - Avoids corner of mouth area

Market Analysis

- Established yet concentrated market for devices to secure breathing tubes
- Growth projected to benefit those finding new applications for airway management devices
- Development was done with burn patients in mind
  - Expansion into other-than-burn care eliminates potential market restrictions

Market Analysis

- 500,000 people seek medical care for burn injuries annually
- 40,000 require hospitalization for treatment
- Competitive devices retail for ~$3 - $15 each
- Leads to market size $120,000 - $600,000 annually
- Foreign sales will increase this
- Figures developed with sole market specializing in burn care
  - Development into other areas will dramatically increase market share / revenue

Current Status / Next Steps

- Prototype developed
  - Additional development not predicted to be extensive; final tweaks of design
- Clinical trial required
  - Fabrication of devices to test
  - Development of protocol for trials
- Exit Strategy
  - Transfer completely or in partnership
  - License relationship