Developing In-Vivo Models and Biomechanical Testing for Laryngeal Burn Injuries

Little is currently known about the pathophysiology and natural history of laryngeal burn injuries. Available data suggest that voice and swallow dysfunction persist after burn injuries involving the larynx, but there are no current in-vivo models or measurement techniques to evaluate laryngeal burn injuries. In this presentation, we will review an invivo laryngeal burn model, newly developed biomechanical testing approaches for the unique laryngeal anatomy, and approaches to modulate wound healing in laryngeal tissues. Together, these form the framework for a platform to test interventions that may decrease injury, improve outcomes, and minimize morbidity from laryngeal burn injuries.