A device to protect the tongue from bite injuries during surgery

Value Proposition

Bite injuries caused during neuromuscular monitoring in surgeries while the patient is under anesthesia are a serious concern in the medical setting due to tongue injuries that can lead to prolonged hospital stays and additional surgeries. Protection of the tongue can be difficult depending on the physical positioning of the patient and current solutions are difficult to place and do not provide adequate protection. For example, rolled up gauze is the currently listed as the best method as a bite block. While inexpensive, gauze presents several challenges. Due to variations on the size, its placement is often inconsistent, it doesn't stay in place, and the tongue has the ability to get between the teeth and the gauze. Hence, there is a need for a device that can prevent tongue injury in a subject.

Technology

Duke inventors have developed a device for preventing tongue injury during surgery, such as the bite injuries acquired during transcranial electrical stimulation motor-evoked potentials. This device is intended to protect the patient and also provide pressure monitoring of the tongue to the anesthesia provider and surgeon. A prototype has been developed of this medical device.

Advantages

- Provides a more consistent yet simple and inexpensive alternative to rolled up gauze for tongue injury prevention
- Can decrease prolonged hospital stays and prevent the need for additional surgeries
- The device includes other features, including pressure monitoring

Duke File (IDF) Number

IDF #:T-005295

Meet the Inventors

Chapman, Joseph "Joe"
Hopkins, Thomas

Contact For More Info

Krishnan, Shweta
919-681-7541
shweta.krishnan@duke.edu

Department

Anesthesiology (Dept. and CRU)

External Link(s)

- From anesthesia nurse Joe Chapman
- From the lab of Dr. Thomas Hopkins