PRESS RELEASE
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New US study confirms the effectiveness of TetraGraph quantitative neuromuscular blockade monitor for children

Uppsala, Sweden. September 7, 2022: Senzime today announced that a study published ahead of print in the Saudi Journal of Anesthesia concludes that TetraGraph, the company's electromyography (EMG)-based monitor, is effective for monitoring neuromuscular blockade in children.

Quantitative Train-of-Four (TOF) monitoring has seen limited use in infants and children, primarily due to lack of effective equipment. In *Owusu-Bediako K, Munch R, Mathias J, Tobias JD. Feasibility of intraoperative quantitative neuromuscular blockade monitoring in children using electromyography. Saudi J Anaesth 2022;16;412-8*, the aim was to prospectively assess the feasibility of using the commercially available EMG-based monitor TetraGraph and adult electrode array TetraSens in pediatric patients undergoing routine inpatient surgical procedures. The study included 100 pediatric patients.

The study concludes, consistent with studies of adults, that intraoperative neuromuscular monitoring in pediatric patients, ranging in weight from 20 to 60 kg, is effective using TetraGraph, even with adult sensors. None of the patients in this study cohort had postoperative respiratory complications or the need to escalate the level to postoperative care.

In addition, the result of the study demonstrates that as EMG-based technology does not require visual observation or free motion of the stimulated muscle group, this technology can be used in surgical procedures with restricted arm positions such as laparoscopic and robotic procedures. Since alternative sites for intraoperative monitoring, such as the facial nerve, can lead to overestimation of recovery and an increased incidence of residual neuromuscular blockade, monitoring responses at the abductor digiti minimi muscle using the EMG-based TetraGraph monitor is preferable.

Pia Renaudin, CEO of Senzime, comments: "It´s great to see another study confirming the feasibility and accuracy of TetraGraph, now also for pediatric patients. Children are an extra sensitive patient group, and by using quantitative monitoring it is possible to increase patient safety for every child undergoing anesthesia."

About the journal

Saudi Journal of Anaesthesia (SJA) is official publication of the Saudi Anaesthetic Association. It publishes peer reviewed original articles and highlights the current advances in anaesthesia and related sciences. It also seeks to encourage and stimulate associated scientific research and communication between hospitals and universities in Saudi Arabia, the Arab countries and the rest of the World.

Owusu-Bediako K, Munch R, Mathias J, Tobias JD. *Feasibility of intraoperative quantitative neuromuscular blockade monitoring in children using electromyography*. Saudi J Anaesth [serial online] 2022 [cited 2022 Sep 7];16:412-8 is available from: **https://www.saudija.org/text.asp?2022/16/4/412/355527**

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About Senzime

Senzime is a Swedish medical device company that develops, manufactures, and markets CE- and FDA-cleared patient monitoring systems. Senzime's employees worldwide are committed to the vision of a world without anesthesia- and respiratory-related complications. The company markets an innovative portfolio of solutions, including the TetraGraph® and ExSpiron® 2Xi for real-time monitoring of neuromuscular and respiratory functions, typically under and after surgery. The goal is to help eliminate in-hospital complications, and radically reduce health care costs related to surgical and high acuity procedures.

Senzime targets a market opportunity valued more than SEK 40 billion per year, and operates with sales teams in the world's leading markets. The company's shares are listed on Nasdaq Stockholm Main Market (SEZI). **www.senzime.com**

Attachments

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