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Abstract

Innovative research to use ultrasound for non-invasive diagnostics and monitoring of changes within the tissue of the brain just in a few minutes

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Abstract:

Acoustocerebrography (ACG): It is a unique, non-invasive transcranial measurement utilizing ultrasound spectroscopy, based on molecular acoustic research. The ACG technology is founded on the measurement of various parameters calculated by analyzing the ultrasound pulses transmitted though the human skull. There are different parameters wich are relevant to detect changes within the brain tissue: - Absorption coefficient - Frequency dependent attenuation - Speed of sound - Tissue elasticity The purpose of the UltraEasy device is to identify potential pathological changes in the brain and is suitable for adult patients age of 18 and older in medical and clinical settings. As a non-invasive and fast (5min) procedure it is gentle for the patient and repeatable as required. To monitor the efficiency of lyse drugs used with stoke patients or to see possible bleedings after an operation, for an example. Nowadays research is fokussed on collecting data of regular probands to compare the outcome with assured pathological cases to envolve the KI in the device constantly. ACG is goinig to be an efficent, easy-to-use, cost reducing addition for the medical device industry

Biography:

Ms. Szalkiewicz holds a degree in nursing (RN) from Medizinische Fachschule “Dr. Georg Benjamin” in Berlin, Germany, and studied Health Sciences and Manangement at the California College of Health Sciences in San Diego, USA. She also completed further education as a Clinical Research Associate and is a certified trainer. She is currently working as Sr. Clinical Support Specialist at SONOVUM GmbH Leipzig, Germany.

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