

MEPs, once confined to use in spine procedures, have expanded to procedures where rapid identification Currently, Motor evoked potential (MEP) recordings are becoming standard of care as a means to monitor the central motor pathways during surgical procedures, at which time these With the introduction of evoked potentials (EPs) in clinical medicine in the mid s, visual, brainstem auditory, and somatosensory EPs played a major role in the diagnosis Motor evoked potentials monitor the integrity of motor pathways during surgical procedures involving the brain, spine, and aorta. Transcranial electrical stimulation is applied through electrodes placed on the scalp, while responses are recorded in peripheral muscle groups. Motor-evoked potential (MEP) responses are the most specific, reliable, and timely clinical intraoperative neurophysiologic monitoring (IONM) test to detect a patient's changing motor status with a possible repetition everys. Motor evoked potentials are degraded by most anesthetics and This causes contrac-tion of nearby scalp muscles and cutaneous pain, and is considered to be rather uncomfortable by most individuals. (A-C) Traces show an electromyographic recording from the abductor digiti The motor-evoked potential (MEP) amplitude, expressed as a percentage of the compound muscle action potential (CMAP) amplitude, was significantly higher with Motor evoked potentials (MEPs) are neuroelectrical signals produced by the spinal cord or peripheral muscles under transcranial or direct brain stimulation. However, transcranial magnetic stimulation, at least over the hand area of motor cortex, appears to be slightly different. Because of this, electrical stimu-lation of the brain through the skull, as introduced by Merton and Morton (), is only used infre-quently. MEPs were originally reported following electrical stimulation (high voltage: V, and short duration/ µs, pulses) of the motor cortex, first introduced by Merton and Abstract. In, Barker and colleagues introduced the technique of The term 'motor evoked potential' (MEP) most commonly refers to the action potential elicited by noninvasive stimulation of the motor cortex through the scalp. Their morphology plays an important role in this process. It describes anatomy FigTests of central motor conduction to the abductor digiti minimi muscle in a normal subject. The lowest threshold form of magnetic stimula-tion This chapter discusses motor evoked potentials (MEPs) recorded by transcranial electrical stimulation (TCES) and transcranial magnetic stimulation (TCMS). MEPs provide direct Motor Evoked Potentials (MEPs) are used to monitor disability progression in multiple sclerosis (MS).