184. THE INFLUENCE AND IMPACT OF THE LOCAL AN D GENERAL ANESTHETICS ON PATIE NTS WITH NEUROLOGICAL DISEASES

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Introduction: In the medicine practice anesthesia is an induced, temporary state with one or more of the following characteristics: analgesia (relief from or prevention of pain), paralysis (extreme muscle relaxation), amnesia (loss of memory), and unconsciousness. Several surgical treatments can be employed for the patients with neurological disorders, such as multiple sclerosis, Guillain-Barré syndrome, Parkinson's disease, Alzheimer disease and spinal cord injury. It is possible that anesthesia related complications are induced in these neurologically complicated patients in the postoperative period. Respiratory dysfunction and autonomic nervous system dysfunction are most common in this population. Respiratory muscle weakness and bulbar palsy may cause aspiration pneumonia. Sometimes, postoperative ventilatory support is mandatory in these patients. Autonomic nervous system dysfunction may cause hypotension secondary to postural changes, blood loss, or positive airway pressure. Patients with motor neuron disease should be considered to be vulnerable to hyperkalemia in response to a depolarizing muscle relaxant. Although preoperative treatment guideline for most neurologic disorders has not been reported to lessen postoperative morbidity, knowledge of the clinical features and the interaction of common anesthetics with the drug therapy is important in planning intraoperative and postoperative management.

Materials and methods: Performing general anesthesia in patients with preexisting neurologic or neuromuscular disease remains controversial.However, studies of significant size to confirm or support the safety of regional anesthesia in these patients continues to remain scarce. Specific guidelines regarding the use of anesthesia techniques in the setting of neurologic disease are difficult to define because of these limitations. Therefore, the goal of this chapter is to review several of the more common neurologic disorders that an anesthesiologist may encounter and outline what information currently exists to help guide the use of general anesthesia.

Results: Every year, millions of people affected by disorders of the central nervous system (CNS) undergo various diagnostic, therapeutic and surgical procedures requiring administration of anesthetic agents. Anesthetics exert their anesthetic, amnesic and analgesic effects by acting on multiple neuronal membrane proteins in the CNS. While some of the causal anesthetic targets have been identified, a large number of anesthetic targets remain unknown. The consequent longterm effect of anesthetic agents on expression of these various molecular targets has been implicated in mediating potentially long-lasting adverse effects.

Conclusion: The selection of appropriate anesthesia drugs and protocol is mandatory, especially in individuals with pre-existing central nervous system disorders, so as to maximize anesthesia efficiency, avoid occurrence of adverse events, and ensure patient safety. This review aims to summarize and consider the effects and potential risks of commonly used anesthetic agents in patients with compromised CNS function. We provide a comprehensive review of the established as well as the

implicated effects of anesthetic agents on the elderly as well as on the pathology and progression of common neurological conditions.

185. THE DIAGNOSTIC ROLE OF ULTRASOUND IN SINONASAL PATHOLOGY

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Introduction: The rhinosinusal pathology represents one of the most frequent diseases in Otorhinolaryngology. The ultrasonography investigation methods applied to the anterior facial sinuses are frequently used to diagnose, especially as a screening test for nasosinusal pathology. They rely on the reflection of ultrasonic beams of the targeted organ, respectively on the analysis of the reflected beams. The sinusal ultrasonography especially addresses to the anterior facial sinuses, the maxillary sinuses, the anterior ethmoidal sinuses and the frontal sinuses. It does not apply to the posterior ethmoidal cells, respectively the sphenoidal sinuses which are a part of the posterior facial sinuses. The objective of the study is to demonstrate the usefulness of ultrasonography in current rhinology examination, for ambulatory evaluation of patients with inflammatory rhinosinusal pathology.

Material and methods: In the study, the group of patients with inflammatory rhinosinusal pathology were subjected to nasal endoscopy afterwards to rhinosinusal echography. B mode ultrasonography was used utilizing the soft tissue convex probe. Patients suffering of chronic and acute rhinosinusitis as well as other inflammatory sinusal pathologies underwent ultrasonography investigations.

Results: The clinical and ultrasonographical examination represented the main method of ambulatory investigation for patients suspected of acute and chronic sinusitis. The average age of patients was 56 years, 40.75% of them were female and 59.25% male, 97.54% suffered of sinusitis and 2.46% of other sinusal pathologies. 28.39% of the patients that underwent ultrasonography were ulterior investigated using sinusal computer tomography (CT) scan.

Conclusion: Sinusal ultrasonography represents a screening method in diagnosing rhinosinusal pathologies. For a complete and complex diagnosis this method should be followed by a CT scan.

Keywords: ultrasonography, computer tomography, rhinosinusitis

186. OPHTHALMOLOGIC MANIFESTATIONS OF ZIKA VIRUS INFECTION

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