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METHODS OF LOCAL ANESTHESIA OF THE HAND

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Currently, pathologies associated with damage to the hand remain one of the most common in surgical practice. In Russia, up to 1% of the population annually visits medical institutions for injuries and purulent-inflammatory diseases of the fingers, and in the structure of purulent diseases that require surgical treatment in the clinic, various types of panaritium account for up to 46%. Based on this, the primary task of the surgeon is the rapid and reliable restoration of the function of the hand, prevention of long-term disability and disability of patients.

In this study, an analytical review of various methods of local anesthesia of the hand was carried out using relevant literature sources of domestic and foreign authors.

Circular anesthesia according to Oberst-Lukashevich is a widely known method of anesthesia during operations on the fingers. This procedure is used for the following indications: finger wounds, panaritium, paronychia, foreign body, ingrown nail, etc. Anesthesia according to Oberst-Lukashevich is applicable only for lesions of the distal phalanges of the fingers and is not performed for massive injuries of the hand. Anesthesia, according to Oberst-Lukashevich, improves blood circulation in damaged tissues, which has a beneficial effect on the repair process, and does not give postoperative complications. The disadvantages of the method include the possibility of incomplete analgesia due to individual anatomical and topographic features of the location of nerves and blood vessels. Pain relief according to Lukashevich is not performed during repeated surgical interventions, during operations on middle, proximal phalanges and deep forms of panaritium.

With the localization of the purulent process on the middle and main phalanx (phlegmon of the rear hand, commissural phlegmon, subcallosal abscess) it is necessary to perform conduction anesthesia according to Brown-Usoltseva. Absolute indications for this method of anesthesia are phlegmon back of the hand, commissural phlegmon, subcallosal abscess.

Another of the most accessible methods of local anesthesia is infiltration anesthesia, which consists in soaking the skin, subcutaneous tissue, fascia and muscles with an anesthetic solution along the future incision from several points at the same time. before surgery.

Infiltration anesthesia according to A. V. Vishnevsky - "the method of tight creeping infiltration" combines elements of infiltration and conduction anesthesia, since the anesthetic drug affects not only the receptors, but also blocks the conduction impulses along the nerve fibers innervating the area of operation. Novocaine blockade gives a stable positive result in inflammatory diseases and disorders of muscle tone of smooth myocytes of the vascular wall of various etiologies. In this case, the spasm is removed, and the tone is restored, returning to the normal physiological state of the vascular wall.

A relatively young method of local anesthesia in hand surgery is the transthecal digital block. The transthecal block can be used for lacerations, nail bed injuries, fingertip injuries and removal foreign bodies. This type of anesthesia is More effective for index, middle, ring finger and little finger, thus providing anesthesia for the dorsal and palmar surfaces. The method is determined by the anatomical course of the nerves of the hand and fingers on the palmar surface in close proximity to the tendons of the flexor muscles of the hand. Generally the digital nerves are derived from the median and ulnar nerves and divide in the distal part of the palm into proper digital nerves, and then into the terminal branches.

All in all, local anesthesia of the hand is now an integral part of surgical practice, since pathologies associated with various injuries of the hand remain one of the most common. There are many ways to do local anesthesia. Each of the above methods is not universal and has both advantages and disadvantages. To improve the quality of operations, doctors continue to develop and improve techniques and options for local anesthesia.