Treatment of severe ischemic pain, caused by obliterating atherosclerosis of vessels of lower extremities

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Goal of Study: Ischemic pain is supported by structural, metabolic and functional changes in the muscles of the lower limbs. Complex conservative treatment aimed at pain level decrease precedes operations on lower limbs vessels.

The goal is to compare the effectiveness of intramuscular Prosidol (opiate analgetic) injections and epidural analgesia using Prosidol and local anesthetics in severe ischemic pain treatment.

Materials and methods: Within the survey 97 patients with obliterating atherosclerosis, grade III-IV were examined. They were offered two ways of analgesia:

- Intramuscular injections of Prosidol
- Epidural analgesia with local anesthetics and Prosidol

Epidural analgesia with local anesthetics (Lidocainum, Bupivacainum, Ropivacainum in standard doses) with Prosidol (up to 30 mg within 24 hours) was given to 67 patients 3-4 days before operation while 30 patients were injected intramuscularly with 20 mg Prosidol on request (up to 80 mg within 24 hours). The patients were recorded the dynamics of the parameters of respiration, blood circulation, neuroendocrine system, clinical biochemistry of blood, indices of red and white blood before and after analgesia.

Results and discussion: it was found out that ischemic pain has a maximum influence on change of indicators of the peripheral and central blood circulation, acid-base status of blood, blood coagulation, inflammatory response system of the body. The neuroendocrine indicators were within the norm and did not reflect the intensity of the pain. Intramuscular injection of Prosidol did not improve parameters of central hemodynamics while regional circulatory parameters tended to decline. Patients have not feel relief, with persistent pain, sleep disruption and disorder of appetite remained. They tossed and turned in bed, rubbed and rocked the affected leg, aggressiveness gave way to apathy and indifference.

Epidural analgesia method in the preoperative period effectively eliminated instability of the central and peripheral hemodynamics, normalized acid-base status of blood. Patients occupied a comfortable position in bed, could take care of themselves, their sleep and appetite normalized. Weak pain they characterized as aching pain.

Conclusion: Intensive preoperative treatment of ischemic pain syndrome, caused by obliterating atherosclerosis, using epidural analgesia with local anesthetics and Prosidol has significant advantages over intramuscular injection of Prosidol.

The incidence of severe pain in patients after intramuscular and epidural administration of painkillers

Epidural analgesia (n = 67)

Intramuscular injection of Prosidol (n = 30)

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