DOI:

PERIFERNI BLOK NERVA ZA OTVORENI PRELOM POTKOLENICE KOD PACIJENTA SA PERIOPERATIVNIM MOŽDANIM UDAROM

PERIPHERAL NERVE BLOCK FOR OPEN LEG FRACTURE IN A PATIENT WITH PERIOPERATIVE STROKE

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SAŽETAK

Perioperativni moždani udar izazov i problem anesteziologa kod potrebe za neodložno operativno lečenje. Odlikuje se visokom stopom morbiditeta i mortaliteta . Incidenca je često potcenjena jer neurološki deficit može biti blaži,tranzitorni i teže dijagnostikovan u neodložnom operativnom lečenju

PRIKAZ SLUČAJA Pacijentkinja starosti 75 godina primljena je na odeljenje ortopedske hirurgije zbog otvorenog preloma potkolenice sa dislokacijom fragmenta. Inicijalno svesna,komunikativna,hemodinamski i respiratorno stabilna,samostalno daje podatke iz lične anamneze, rekonstruiše događaj i navodi osećaj nestabilnosti i vrtoglavice pre povrede.Navodi da leči hipertenziju i da je pre 15 godina bila donor bubrega za blisku srodnicu.Tokom preoperativne pripreme dolazi do izmene stanja svesti sa izraženom pospanošću, konfuznošću i slabošću nepovređenog ekstremiteta. Konsultovan neurolog i potvrđen neurološki nalaz u pravcu novonastale slabosti ekstremiteta uz izmenu stanja svesti i blage disfazije. Povreda je zahtevala neodložno zbrinjavanje–hemostaza, debridment i fiksacija preloma. Ovo je uslovilo odlaganje radiološke obrade-MSCT endokranijuma do operativnog zbrinjavanja i potom odluku o daljoj terapiji.U skladu sa opštim stanjem pacijenta,anestezija izbora je bila periferni nervni blok (n.femoralis, n.isciadicus i n.saphenus – adductor canal block) pod kontrolom ultrazvuka (Levobupivakain 0.375% 15ml, Lidocain 1,25% 5ml po nervu). Intraoperativno zapažena izraženija pospanost uz stabilne vitalne parametre. U intezivnoj nezi postoperativno uz pospanost, konfuznost uočava se afazija i potpuna slabost kontralateralno. Po nalogu neurologa, uključena antiedematozna terapija i urađen MSCT koji potvrđuje ishemični fokus fronto-parijetalne lokalizacije. U daljem toku uz antiedematoznu terapiju, profilaksu rekurentne tromboze i ranu rehabilitaciju dolazi do postepenog oporavka pacijentkinje.

ZAKLJUČAK Urgentnost zbrinjavanja otvorenog preloma potkolenice je u velikoj mogućnosti razvoja infekcije – osteomijelitisa. Protokoli predlažu zbrinjavanje unutar 6-8h. Iz ugla perioperativnog moždanog udara anestezija može maskirati početne simptome i otežati postavljanje dijagnoze - značajna smernica u odluci. Memtsoudis i saradnici pokazali su da je opšta anestezija nezavisni prediktor perioperativnog
moždanog udara u hirurgiji kuka i kolena gerijatrijske populacije. U izboru anestezije strategija je očuvanje cerebralne autoregulacije – hemodinamska stabilnost. Blok perifernih nerava i postavljanje katetera pruža analgeziju (obrada rane – debridman,hemostaza i dijagnostika), operativnu anesteziju, ranu rehabilitaciju, manji broj komplikacija u postoperativnom period, kraći boravak u bolnici i manje troškove lečenja.
Uvođenje bloka pod kontrolom ultrazvuka omogućava siguran bezbedan blok,manje anestetika i manje potencijalnih komplikacija – intravaskularno davanje,oštećenje nerva.
Ključne reči:periferni nervni blok,perioperativni moždani udar,ultrazvuk,otovreni prelom donjeg ekstremiteta

ABSTRACT

Perioperative stroke,anesthesiological challenge and problem in urgent surgical treatment with high rate of morbidity and mortality.The incidence is often underestimated-neurological deficit can be milder,transient and more difficult to diagnose in urgent operation.

A 75-year-old female patient was admitted to the department of orthopedic surgery due to an open fracture of the tibia with fragment dislocation. Initially conscious, communicative, hemodynamically and respiratory stable, she independently provides data from her personal history, reconstructs the event and states the feeling of instability and dizziness before the injury. She states that she is treating hypertension and that 15 years ago she was a kidney donor for a close relative. During the preoperative preparation, there is a change in the state of consciousness with pronounced drowsiness, confusion and weakness of the uninjured extremity. A neurologist was consulted and the neurological findings were confirmed in the direction of newly developed limb weakness with altered state of consciousness and mild dysphasia. The injury required immediate care – hemostasis, debridement and fracture fixation. This led to the postponement of the radiological processing-MSCT of the endocranium until operative treatment and then the decision on further therapy. In accordance with the patient's general condition, the anesthesia of choice was a peripheral nerve block PNB (n.femoralis, n.isciadicus and n.saphenus - adductor canal block) under ultrasound control (Levobupivacaine 0.375% 15ml, Lidocaine 1.25% 5ml per nerve). Intraoperatively, more pronounced drowsiness was observed with stable vital parameters. In intensive care postoperatively, along with drowsiness, confusion, aphasia and complete weakness contralaterally are observed. According to the order of the neurologist, anti-edematous therapy was included and an MSCT was performed, which confirms the ischemic focus of the fronto-parietal localization. In the further course, with anti-edematous therapy, prophylaxis of recurrent thrombosis and early rehabilitation, the patient gradually recovers.

The urgency of treating an open leg fracture lies in the high possibility of developing an infection-osteomyelitis.Protocols suggest treatment within 6-8hours.Anesthesia can mask the initial symptoms of perioperative stroke and make diagnosis difficult-an important guideline in
the decision.Anesthesia strategy is to preserve cerebral autoregulation-hemodynamic stability.PNB and catheter placement provides analgesia(debridement,hemostasis and diagnostics),anesthesia,early rehabilitation,fewer complications in the postoperative
period,shorter hospital stay and lower treatment costs.

Ultrasound makes PNB a safe and secure technique with small possibility of complications(direct administration of local anesthetic),significant in high-risk patients.