

Our Experiences in Preventing Brain Edema with ISOTOL.

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On IV. Congress of Yugoslav Neurosurgeons and Neurotraumatologists Skopje (Ohrid, May 22-26, 1973) and the Balkan Symposium on Traffic Injuries to the Head (Ohrid, May 22-26, 1973), I published my paper: Our Experiences in Preventing Brain Edema with Isotol (20% percent Mannitol), in which I pointed all the contraindications for its use, including intracerebral hemorrhage. Surprised by the use of Isotol in such cases half a century after these expert meetings of Yugoslav neurosurgeons and neuro-traumatologists, in many neurological and neurosurgical departments throughout Yugoslavia after its disintegration, and fifty years after these scientific meetings around the world, I decided to republish summaries of my presentations, and to explain the mechanism by which Isotol, in such cases, increases bleeding and endangers the life of the patient.

Isotol collects the brain substance and thus widens the grooves between the gyrus and the channels through which blood vessels flow in the brain tissue. The slightly connective tissue, with which the blood vessels are connected to the brain tissue, is nevertheless strong enough to pull the walls of the blood vessels and widen the openings through which the blood flows.

Summary of our experiences

Timely application of Isotol, 20% Mannitol, is of great importance in the prevention of cerebral edema in craniocerebral trauma. By respecting the contraindications: anuria, renal failure, cardiac decompensation, intracerebral hemorrhage, arteriosclerosis, and electrolyte deficiency and imbalance, it is possible to prevent, or at least alleviate the onset and progression of cerebral edema. The most dangerous contraindication is intracerebral hemorrhage, which usually remains undiagnosed in an early stage after injury, when Isotol is nevertheless applied.

In most cases, we applied 500 ml of Isotol in 24 hours. In severe cases, where there were no contraindications, we applied 1000 ml of Isotol per day. With prolonged use, the use of physiological NaCl, 20 mEq NaCl per liter of Isotol, is recommended. In elderly, adipose, and cardiac subdecompensated patients, the use of appropriate cardia is recommended. We applied most often Cedilanide 0.4 i.v. daily, due to the possible occurrence of cardiac deficit due to the growth of extracellular fluid. With prolonged use, we control electrolytes and hemogram (hyperkalemia, hyponatremia, relative hemoconcentration and polycythemia).

A statistical presentation of the five-year use of Isotol in craniocerebral trauma in Pomurje, Slovenia is given, with reference to application errors and results.

Literature:

IV. Congress of Yugoslav Neurosurgeons and Neurotraumatologists Skopje - Ohrid, 22-26. May 1973
Balkan Symposium on Traffic Head Injuries. (Ohrid, May 22-26, 1973)
Ante Rilović, Murska Sobota General Hospital, Slovenia. Our experience in preventing cerebral edema with Isotol.

By the way, I would like to say something about the most common mistakes in the treatment of senile heart failure with Lanitop.

THE MOST COMMON ERRORS IN THE TREATMENT OF ELDERLY HEART FAILURE WITH LANITOP AND OTHER MODERN DIGITALIS PREPARATIONS.

Lanitop, and other modern preparations of Digitalis, act strongly and promptly immediately after application such as Strofantin, which we give before operations in elderly patients. As it should not be administered three-

day before application, it is recommended that an appropriate procedure be given between repeated four-days (preferably Monday, Tuesday, Wednesday and Thursday) Lanitop applications with a three-day break (Friday, Saturday and Sunday) to prevent possible arrhythmias, which are during operation monitored and treated by anesthesiologists and cardiologists.