REGARDING MEDICAL TREATMENT OF MODERATE BRAIN CONTUSIONS IN CHILDREN

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Medical treatment (MT) of moderate brain contusions in children (MBCC) is multivariant. It is discussed in traditional manner in the literature with no special envisage of MBCC (1-9). We aimed at studying our own experience of MT of MBCC and suggesting a therapeutic programme - "therapeutic model".

Our material includes 233 clinical cases of MBCC of our own. We carried out a therapeutic enquiry and retrospective investigation of cases. According to the incidence of application of medication we have systematized therapy in groups as follows: 1) Dehydratants - 58.4%; 2) Vitamins - 57.9%; 3) Antibiotics - 51.5%; 4) Barbiturates - 47.2; 5) Analgesics - 43.5%; 6) Haemostatics - 31.3%; 7) Hydratants - 21.9%; 8) Steroids - 19.3%; 9) Cylotropin - 16.3%; 10) Tranquilisers - 6.0%; 11) Nootropic - 6.0%; 12) Encephalotropic - 5.5%; 13) Sedatives - 4.7%; etc. Most frequently 40% Glucose solution i.v and 30% Magnesium sulfate orally were applied. Manitol 10% and Furosemide were used less frequently. The most preferred vitamins are "C", "B₁", "B₆". The antibiotics were applied locally and parenterally. Intraoperatively we have preferred non-epileptogenic types - rifocin, kanamycin, gentamycin, etc. Barbiturates were given the value of a "specific" component of MT. They are sedative, antiedematous and anticonvulsant medication. The drug of choice remains phenobarbital and it has to be used for about six months. The application of analgesics is highly variable. We have used "liquid therapy" as well infusing about half of the normal needs (replacement infusions). Steroids are part of the basic therapy with antiedematous and neuroprotective effect. Nootropic and encephalotropic medications show a promising effect in the acute and subacute periods. An unresolved problem is the long-term therapy after the acute period. In the literature available MT is viewed upon stereotypically making no distinction of the magnitude of contusions (1,3-5,9). Our therapeutic experience proves that in MBCC the main axis of MT remains that of NEUROTROPHIC - SYMPTOMATIC - NEUROPROTECTIVE measures. It is suggested that manitol, passive hyperventilation and glucocorticoids are reliable antiedematous means (6). Hydration is defended especially in preschool age (2). Other investigators (7) recommend hyperventilation and minimal intravenous infusions with the
usage of osmotic diuretics. According to other studies (9) support of normotherapy is an important task of MT. Our experience shows that combined MT achieves better results. For relieving of venous edema we place the head higher than the trunk (8). This investigation showed than neurorehabilitation, nootropic and encephalotropic medication favours recovery in MBCC.

Based on our own and other experience in MT we propose a therapeutic model comprising traditional and modern neuroprotective measures. It may serve as a "computation ruler" because it includes therapeutic calendar and medication schedule. The therapeutic model included below is in pace with the modern trends in MT. Metaphylaxis represents a "flowting exchange rate" of supportive therapy with mandatory EEG control. The indicative list of medication and the "therapeutic model" is a contribution of ours in the investigation of the medical therapy of MBCC.