high level of energy metabolism in brain body's activity must be directed to brain's requirements. The aim of our research is study the activity of the enzymes involved in brain energy metabolism: lactate dehydrogenase (LDH), aconitase (AH), malate dehydrogenase (MDH), succinate dehydrogenase (SDH) in brain structures of rats exposed to hypoxia prenatally.
METHODS: The 20 female rats were exposed to hypoxia with 5% O2+ 95% N2 inorganogenesis stage during 3 days for 10 min. The progeny was divided into 3 groups and was bred until 17-,30-, 90-days-old ages. Orbital, sensorimotor, limbic cortices, hypothalamus and cerebellum were separated for study of enzymes activity in tissue homogenates, cytosolic and mitochondrial fractions.
RESULTS: It was revealed that increasing in LDH- and MDH-activities (<0.001; <0.01) in brain structures of rats prevented metabolic disturbances in the regulation mechanisms of biosynthetic and bioenergy processes in the brain. AH-activity increased which is reversible (<0.01). The highest indices of SDH-activity showed hypothalamus and cerebellum of 30-day old rats as compared to other structures (<0.001). This can be explained by the activation ofbiosynthetic reactions in these brain structures. At the same time, different purposefulness in the changes of these enzymes can be related with structural organization on organogenesis stage.
CONCLUSION: Analysis of the changes in the enzyme system during ontogenesis allows adaptive mechanisms being formed in this period to be revealed and study the dynamics of changes in their activity under changed functional state after hypoxia which will give an opportunity to reveal adaptive reserves of the enzymes in the organism.

PC207

Evaluation of Wrist Flexor - Extensor Muscle Strength in Patients with Carpal Tunnel Syndrome

Hamit Yılmaz[1], İsmail Boyraz[2], Bedri Selim Benek[1], Hakan Şakar[1], Şaban Bayram[1], Kenan Gümüştekin[1]
[1]Department of Physiology, Abant Izzet Baysal University, Bolu, Turkey
[2]Department of Physiotherapy and Rehabilitation, Abant Izzet Baysal University, Bolu, Turkey

AIM: Carpal Tunnel Syndrome(CTS) occurs as a result of compression of the median nerve passes through carpal tunnel. Frequencies of the CTS in studies were reported to be 0.1-0.5% in the general population. Aim of our study was to evaluate the wrist muscle strength that was affected by CTS.
METHODS: 20 healthy people and 20 patients with CTS identified by EMG were recruited. Cases wrist muscle strength measurements were made using isokinetic dynamometer.
RESULTS: There were bilateral CTS in 15 patients, mild CTS in 12 patients and mild-to-moderate in 5 patients, moderate in 2 patients on right side and light in 12 patients, 5 patients with mild-to-moderate, moderate in 1patient, severe in 1 patient on left side. Body mass index(BMI) was calculated 28.7 in patients and 29.8 in control-group. 32˚ on right-hand, 32.85˚ in left-hand was found average extensor range in patient-group, and 31.65 on right, 33.8 on left was found in control-group. 63,3˚ on right-hand, 59,65˚ in left-hand was found average flexor range in patient-group, and 56,8˚ on right, 57,95˚ on left was found in control-group. Right-hand concentric flexor muscle strength peak value was found to be 7.95±3.83 at 120˚/sec angular velocity, 7.7±3.37 on left-hand; right-hand concentric extensor muscle strength peak value was 5.1±1.5, 5.3±1.41 on left in patient-group. Right-hand concentric flexor muscle strength peak value was found 7,7±3.93 at 180˚/sec angular velocity, 7.8±2,64 on left-hand; right-hand concentric extensor muscle strength peak value was 5.35±1.87, 5.4±1.35 on left in patient-group. According to measuring, peak value of right-hand extensor muscle strength in patient-group was significantly different than control-group at 120-180 range/sec($p<0.05$). According to measuring of right flexor range value in patient-group was significantly higher than control-group ($p<0.05$). There was no significant difference in gender, age and BMI between two groups ($p>0.05$).
CONCLUSIONS: It shows that hands muscle strength was affected in patients of with CTS.

PC208

Cerebral Artery Remodeling Following Subarachnoid Hemorrhage in Rodent Models

Bilge Güvenç Tuna[1], Nadia Lachkar[2], Judith De Vos[2], Erik Ntp Bakker[2], Ed Van Bavel[2]
[1]Department of Biophysics, Yeditepe University, Medical Faculty, Istanbul, Turkey
[2]Department of Biomedical Engineering and Physics, Academic Medical Center, Amsterdam, The Netherlands

AIM: Vasospasm is known to contribute to delayed cerebral ischemia following subarachnoid hemorrhage (SAH). We hypothesized that vasospasm initiates structural changes within the vessel wall, possibly aggravating ischemia and leading to resistance to vasodilator treatment. Structural changes within the arterial wall known as vascular remodeling. We investigated the effect of blood on cerebral arteries with respect to contractile activation and vascular remodeling.
METHODS: Middle cerebral and basilar arteries isolated from rats were incubated with culture medium (control), hemolyzed blood or hemolyzed blood with transglutaminase inhibitor (TG2i, 10-5 M) for 16 hours. The mechanical properties of the arteries were measured by the wire myograph before and after incubation. The in vivo effect of SAH and TG2i administration on the biomechanics of the middle cerebral arteries and basilar artery were investigated, in rats; using both a single prechiasmatic blood injection model and a double cisterna magna injection model, and in mice; using a single prechiasmatic blood injection.
RESULTS: In vitro experiments on rodent basilar and middle cerebral arteries showed a gradual contraction in response to overnight exposure to blood. After incubation with blood, a clear inward remodeling was found, reducing the caliber of the passive vessel ($p<0.05$). TG2i fully prevented this remodeling ($p<0.05$). However, we found no substantial changes in active or passive biomechanical properties in vivo.
CONCLUSIONS: We conclude that extravascular blood can induce matrix remodeling in cerebral arteries, which reduces vascular caliber. This remodeling depends on transglutaminase activity. However, the current rodent SAH models do not permit in vivo confirmation of this mechanism.

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Methotrexate Effect on Lung Tissue; the Role of Gallic Acid

Mustafa Saygın[1], Halil Aşçı[2], Önder Öztürk[3], Ilter Ilhan[4]
[1]Department of Physiology, Faculty of Medicine, Suleyman Demirel University, Isparta, Turkey
[2]Department of Pharmacology, Faculty of Medicine, Suleyman Demirel University, Isparta, Turkey
[3]Department of Chest Diseases, Faculty of Medicine, Suleyman Demirel University, Isparta, Turkey
[4]Department of Medical Biochemistry, Faculty of Medicine, Suleyman Demirel University, Isparta, Turkey