

interstitial therapy electrophoresis a preparation Karpain, duration of procedure of 12–15 minutes daily, on course of treatment of 12–15 procedures carry out hypodermic introduction ozone-oxygen mixes and the subsequent electric stimulation of a place of introduction ozone-oxygen mixes an electric current frequency.

Application of this method leads to reduction and knocking over of a painful syndrome at patients with knee osteoarthritis, to reduction of inflammatory reaction of structures of a knee joint, restoration of function of a knee joint. 397 patients have been treated. The steady clinical effect of application of this way, received at treatment of patients with knee osteoarthritis joint allows to recommend this method for wide clinical application.

The complex diagnostic approach including radiological and ultrasonic researches is actively

applied to an estimation of presence and expressiveness of a pathology at level of a knee joint in sanatorium. In some cases, for specification of character of pathological process directed patients for research to treatment-and-prophylactic medical institutions of Barnaul for carrying out of a computer tomography or a magnetic resonance imaging of a knee joint. The method of ultrasonic diagnostics of a pathology of a knee joint is actively applied to control of results of treatment.

Thus, use of a complex method of knee osteoarthritis treatment allows to provide treatment of patients with knee osteoarthritis. Result of this treatment is reduction and knocking over of a painful syndrome at patients with knee osteoarthritis, reduction of inflammatory reaction of structures of a knee joint, restoration of function of a knee joint.

ZEHN-JAHRE EXTRAKORPORALE STOSSWELLENTHERAPIE (ESWT) BEI PSEUDARTHROSEN

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EINLEITUNG: Unverheilte Knochenfrakturen werden nach drei Monaten als verzögerte Knochenbruchheilungen und nach sechs Monaten als Pseudarthrosen bezeichnet. Im durchschnittlichen Patientengut in Staaten mit gut organisiertem Trauma-management resultieren diese Knochenheilungsstörungen in Häufigkeiten von z.B. 4,5% an der Klavikula, 4,3% nach Tibiaumstellungsosteotomien oder allgemein max. 7%. Operative Korrekturingriffe gelten als Therapiegoldstandard spätestens im Pseudarthrose-Stadium. In ausgewählten Fällen führen wir auch nicht-invasive Extrakorporale Stosswellentherapien durch und erwarten dadurch Knochenstoffwechselstimulationen, die denen operativer Eingriffe ähnlich sind.

MATERIAL UND METHODEN: Seit 2001 haben wir mehr als 450 ausgesuchte Knochenheilungsstörungen frühestens drei Monate posttraumatisch bzw. nach letzter Osteosynthese mittels fokussierter hochenergetischer Stosswellentherapie mit oder ohne computerassistierte Navigation ambulant behandelt. Überwiegend jene Patienten, die Arbeitsunfallopfer waren, wurden fachunfallchirurgisch nachuntersucht oder mittels Fragebogen kontrolliert.



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ERGEBNISSE: Ausreichend stabile Frakturheilungen und weitere Therapieerfolgskriterien wurden unabhängig von der Art der primären Behandlung in 80% nach zwei bis sechs Monaten festgestellt. Delayed und non-unions, atrophe und hypertrophe Formen sowie Zustände nach einfachen oder Trümmerfrakturen, Osteotomien oder Arthrodesen kleiner und großer Knochen wurden zusammengefasst, weil sie dem üblichen Spektrum entsprechen.

SCHLUSSEFOLGERUNG: Die ESWT wird nur in einigen Staaten und dort auch nicht flächendeckend für die operationsersetzende Frakturbehandlung eingesetzt. Unsere retrospektiven Fallkontrollen am eigenen Patientengut weisen auf ermutigende Therapieerfolge und gänzliche fehlende Komplikationen hin und liegen im Trend jener Studien höherer Evidenzgrade, die in den ESWT-Zentren in Österreich, Taiwan oder Kolumbien publiziert worden sind. In Deutschland wird die ESWT nur ausnahmsweise von institutionellen Kostenträgern bezahlt, obwohl die Gesamtkosten sehr deutlich geringer sind als für stationäre Operationen

in Narkose. Außerdem existieren geeignete Stosswellentherapiegeräte nur punktuell und spezialisierte

Ärzte noch seltener. In Hannover können alle in Frage kommenden Fälle zeitnah versorgt werden.

CHANGES OF RHEOLOGICAL INDICATORS OF ERYTHROCYTES IN ARTERIAL HYPERTENSION, COMPLICATED WITH MYOCARDIAL INFARCTION AND STENOCARDIA

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It is shown that in the case of arterial hypertension, rheological properties of the main carriers of oxygen and metabolites in blood are disordered, though, in case of cerebral ischemic affections these changes are absent. With appearance of the newest methods of erythrocytes' plastic properties research there also appeared a possibility to specify our conceptions about an intensity degree of hemodynamic disorders in the case of vascular system diseases.

MATERIAL AND METHODS. In our research were 12 men, who suffered from an arterial hypertension, complicated with stenocardia, and 12 patients with myocardial infarction, 6 women and 6 men. A control group was 15 healthy patients of proper age, 12 men and 3 women. We have examined main rheological determinants of erythrocytes by straight adequate methods in whole blood. Deformability was examined by diffracting osmoscany method, aggregative properties – with the help of piezodynamic method in a microcuvette on installations. The methods used let us estimate not only integral indicators of erythrocytes' deformability and aggregation, but also assess sphericity (S/V ratio), internal viscosity of erythrocytes, aggregations' solidity and the speed of their spontaneous formation in whole equalized blood. The blood was taken from ulnar vein on an empty stomach in the morning into test tubes with heparin at 150 units/ml.

RESULTS OF RESEARCH. Deformability index was heightened in both groups of patients. An Omy indicator's decrease in both groups of patients is noticed: (159±8) mOsm with arterial hypertension and myocardial infarction and (157±9) mOsm – with stenocardia against (148±7) mOsm in healthy people ($p < 0,05$). Subject to this proviso, a slight decrease of O' indicator is mentioned: (397±9) mOsm and (393±10) mOsm accordingly against (404±12) mOsm in control. Regarding spontaneous aggregation, both minimal (an indicator Uo) and maximum (Oq) aggregates' solidities to mechanical destruction increase, which leads to reliable increase of aggregation index from (1,2±0,4) rel. units in control to (2,3±0,5) rel. units in the case of infarction ($p < 0,01$) and (1,8±0,3) rel. units ($p < 0,05$) with stenocardia. Change of Omy indicator is less pronounced, but increase of deformability, in comparison with men, is more significant. Strength properties of erythrocytes' aggregations and the speed of their spontaneous formation are higher among women. So, the aggregation speed among women, who suffer from myocardial infarction, increases in 12%, while among men – only in 5%.

DISCUSSION. Our research have shown an absence of significant changes of erythrocytes' deformability among patients, who suffer from arterial hypertension with myocardial infarction and bouts of stenocardia, but, reliable change of erythrocytes' sideview with decrease of S/V ratio (change of Omy indicator) is mentioned, that is swelling of red cells, and also a tendency to dehydration of hemoglobin (O' indicator), that is decrease of internal viscosity of erythrocyte. Regarding sex differences in dynamics of disease, we can presuppose that correction of deformative properties of erythrocytes among women occurs in a more pronounced way, in comparison with men. Though, a risk of ischemic affections, due to a heightened aggregation status among women, is higher.

CHOICE OF METHOD OF SURGICAL TREATMENT IN CHILDREN WITH ECHINOCOCCOSIS LUNG

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OBJECTIVES OF THE STUDY. Improved results of surgical treatment of children with various forms of echinococcosis of the lungs.

MATERIALS AND METHODS. Over the last 10 years in the Department of Paediatric Surgery of the Tajik Institute of Postgraduate Medical Training were on the treatment of 152 patients with lung