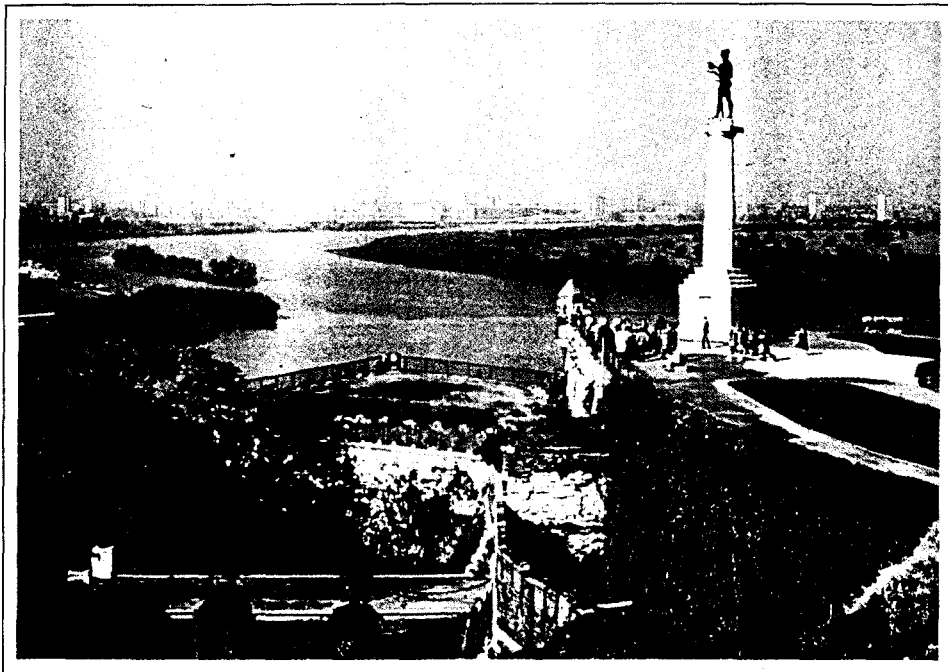




EAST AND WEST COMBINED ORTHOPAEDIC MEETING

BELGRADE 11 - 16 SEPTEMBER 1988
YUGOSLAVIA

**UNDER THE AUSPICES OF SICOT
ABSTRACTS**



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Ljupco Serafimov, M.D.
Milan Stevanovic, M.D.

LIST OF PARTICIPANTS EAST/WEST CONGRESS OF ORTHOPEADIC SURGERY

PROF DOTLIC:
INSTITUTE OF PHYSICAL
MEDICINE. AND
REHABILITATION,
BELGRADE:

SUBJECT: SPORTS INJURIES: given in the absence of Prof JORVIC:

PROF DEKLEVA:
CLINICAL CENTRE ZEMUN
DISTRICT HOSPITAL, BELGRADE.

SUBJECT: SCIENTIFIC STUDIES ON PERFUSION AND DIFFUSION KINETIC:

PROF STEFANOVIC, PROF DEKLEVA, and DR JELKA DEKLEVA:
DEPARTMENT OF PHYSICAL MEDICINE.
CLINICAL CENTRE
ZEMUN DISTRICT HOSPITAL.

SUBJECT: OSTEOPOROSIS AND SUDECS:

DR ZIVADINOVIC, PROF
DJUKIC.
REHABILITATION
CENTRE,
GRAMZIGRADSKA
BANJA:

SUBJECT: MORBUS SUDEC:

DR BAROVIC:
DEPARTMENT OF PHYSICAL MEDICINE
GENERAL HOSPITAL,
MARIBOR:

SUBJECT: LUMBAR SYNDROME:

DR LIPOVEC, DR BAROVIC:
REHABILITATION
CENTRE.
DOBRNA:

SUBJECT: SUDECS AND POST OPERATIVE LYMPHOEDEMA:

DR SZEKELJI
CLINIC FOR TRAUMATOLOGY
DEPARTMENT OF SPORTS MEDICINE.
ZAGREB:

SUBJECT: CELLULITIS AND OEDEMA:

PRIM. DR RATHKOLB, DR AMMER:
THE BOLTZMANN
INSTITUTE.
HANUSCH
HOSPITAL
VIENNA:

SUBJECT: INTERMITTENT CLAUDICATION, DISEASES OF THE
PERIPHERAL CIRCULATION AND PERIARTHROSIS OF THE
HIP:

Programme - Content

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1. TOTAL HIP REPLACEMENT
2. BONE GRAFTING
3. VACUSAC THERAPY SYMPOSIM
4. BONE STRUCTURE AND ELECTRIC POTENTIALS
5. FREE PAPERS (Monday, September 12, 1988)
6. DIAGNOSTICAL AND SURGICAL ARTHROSCOPY
7. LEGG—CALVE—PERTHES DISEASE HIP SURGERY IN CHILDHOOD
8. POSTOPERATIVE INFECTION IN THE BONE SURGERY
9. ROUND TABLE SYMPOSIM OF CEFTRIAZONE (LONGACEPH)
10. LIMB LENGHTENING
11. INJURIES OF THE SPINAL COLUMN 178 - 201
12. BONE TUMOURS
13. EXTERNAL FIXATION: STATE OF ART 14.SCOLIOSIS
15. HYPERBARIX OXYGEN IN THE BONE SURGERY
16. ORTHOPAEDIC PROBLEMS IN HAEMOPHILIA
17. FREE PAPERS (Friday, September 16, 1988)
18. ADULT FOOT SURGERY
19. REPLANTATION AND MICROSURGICAL RECONSTRUCTION IN ORTHOPAEDICS
20. SPECIAL GUEST SPEAKERS
21. POSTER EXHIBITION

MONDAY, September 12, 1988

VACUSAC THERAPY SYMPOSIUM

Time: 9,00-10,45

Chairmen: Himmelstrup H., Frederiksberg,
Denmark Ammer K., Wien, Austria
Dekleva N., Belgrade, Yugoslavia

Specialist Papers:

56. 125 IODINE BIFFUSION THROUGH AMNIOTIC MEMBRANE UNDER VACUSAC CONDITIONS Stankovi6 S., Genba6ev O., Dekleva N., Zemun, Yugoslavia
57. DIFFERENT FORMS OF TREATMENT WITH THE VACUSAC SYSTEM IN PATIENTS WITH PERIARTHROPATHY OF THE HIP Ammer K., Hein L, Rathkolb O., Wien, Austria
58. VACUSAC THERAPY IN TREATMENT OF MORBUS SUDECK Zivadinovic G., Duki6 V., Veljkovi6 Lj., Gamzigradska banja, Yugoslavia
59. VACUUM THERAPY AND TREATMENT OF LUMBAR SYNDROME Barovifi J., Turk Z., Maribor, Yugoslavia
60. ALGODYSTROPHIA TREATMENT WITH VACUSAC Dekleva N., Dekleva-Dordevi6 J., Zemun, Yugoslavia
61. BENEFICIAL EFFECTS OF VACUSAC TREATMENT OF PATIENTS WITH MODERATE ARTERIAL INSUFFICIENCES — A DOUBLE BLIND STUDY Himmelstrup H., Himmelstrup B., Trap-Jensen, Frederiksberg, Denmark
62. VACUSAC TREATMENT OF SPORTS INJURIES Jovi6 D., Dotli6 R., Belgrade, Yugoslavia
63. SYNDROMA SUDECK AND OTHER POSTTRAUMATIC COMPLICATIONS Lipovec K., Dobrna, Yugoslavia
64. THERAPY OF ANKYLOSANT SPONDYLITIS WITH VACUSAC METHOD SPORTS' INJURIES AND TREATMENT WITH VACUSAC Szekely A., Zagreb, Yugoslavia
65. HYPOBARRIC THERAPY IN TREATMENT OF ANGIOPATHIES Barovi6 J., Turk Z., Maribor, Yugoslavia

DISCUSSION

Coffee break:

10,45-11,15

1[^]IODINE DIFFUSION THROUGH AMNIOTIC MEMBRANE UNDER VACU[^]ft C

Title

Authors

Institution

CONDITIONS

Slobodanka -Stankovic¹, Olga Genbacev¹, N. Dekleva²

¹Institute of Endocrinology, Immunology and Nutrition-INEP, Zemun,

²"Zemun" Clinic and Hospital Centre, Zemun, Yugoslavia

The effect of vacuum was followed up on the basis of the kinetics of ¹²⁵I labelled iodine, as a radioactive tracer, being diffused through the prepared membrane of the placenta. The kinetics of ¹²⁵I diffusion was examined in a diffusion cell where a membrane separated two compartments of 110 ml total volume. The starting solution (NaI¹²⁵) contained 51.8 kBq/ml ¹²⁵I. Aliquots of 100 μ l of the solution were taken from the far compartment and radioiodine diffusion kinetics measured. The study was carried out at room temperature, with or without vacuum (control). It was established that the diffusion of radioiodine under vacuum conditions was extensively raised in relation to the control group, however, saturation was attained under both sets of conditions.

Title

Authors

Institution

Different Forms of Treatment with the Vacusac System in Patients with Periarthopathy of the Hip

K.Ammer, L.Hein, O.Rathkolb

Ludwig Boltzmann Forschungsstelle fur physikalische Diagnostik, Wien, Osterreich

Patients with painful periarthopathy of the hip were included in the study. All had a painful out-rotation, but painless in-rotation of the

affected hip. Also pain at pressure over the Trochanter major and at least one tender point of the M.glutaeus medius and/or M.glutaeus minimus

were found. The patients were allocated by random to one of two treatment groups. One group was treated in the bag and the other with the cups of the Vacussc System. Vacuum level was set at 20 percent in each group. 10 treatments, three times a week, were given. Overall pain was measured by a visual analog scale, pain at pressure was quantified by the dolori-meter of Fischer. Also the time for walking a distance of 10m was registered. All measurements were done before and after treatment. Preliminary results are presented.

Title Authors

Institution VACUSAC-THERAPY IN TREATMENT OF MORBUS SUDECK

Gorica Zivadinovic, Veljko Djukic, Ljubomir Veljkovic,

Institute for Prevention, Treatment and Rehabilitation of
Vascular Diseases,

GAMZIGRADSKA BANJA, Yugoslavia

Morbus Sudeck (Sudeck Syndrome, Algodystrophic Syndrome, Reflexive Neurovascular Dystrophia.) indicates painful vasomotor and trophic disturbances of the extremities causing changes of the skin, subcutaneous tissue, muscle tissue and bones as well. Etiology factors can be traumatic or idiopathic. We can easily say that the disease cannot be cured. The experiences in treatment of Morbus Sudeck show mainly doubtful results, permanent functional disorders and usually invalidity.

In Gamzigradska Banja, two years ago, we started application of VACUSAC therapy for treatment various pathologic conditions among which Morbus Sudeck of different etiology. Total number of 72 patients in various clinical stages. Preliminary results are satisfactory and give encouraging effects of treatment.

VACUSAC therapy is for sure conducive method in treatment of this complicated syndrome as atgodystrophy is, particularly in cases when due to the injured skin tissue" of the extremity, osteosynthetic material injury or due to the other reasons alternative physical agents are not applicable.

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The 1970*s showed the significance of vacuum therapy in the treatment of lumbar syndrome was renewed by a modern scientific approach to the thousand year old knowledge of traditional Chinese medicine.

The possibility of improving the metabolism of the affected region, oxygen transport, elimination of toxic products with such a physical procedure as vacuum, aroused our interest in the Danish device VACUSAC used in our research. This device first offers the possibility of exposing the patient entirely to the effect of a combination of various pressures and underpressures

In 1937 we used vacuum therapy in 33 cases of both sexes aged 24 - 68 years. Out of 550 various forms of vacuum therapy we used the hypobaric effect from 0.25 - 0.45 BAR in 15 sessions and attained an evident improvement in 40 patients. In comparison with the control group, in which we used well known physical procedures and reached the analgetic effect in 24 patients, the application of vacuum therapy signifies an 82 % improvement of the clinical state.

Title
 Authors
 Institution

ALGODYSTROPHIA TREATMENT WITH VACUSAC
 N.Dekleva and J.Dekleva - Dordevic
 CLINICAL HOSPITAL ZEMUN - Vukova 9, 11080 BEOGRAD, Zemun

The pathophysiological mechanisms of the algodystrophic syndrome have no been fully explained yet. The study of its evolution shows that it develops over a certain period of time and that the evolutionary course is hard to interrupt until the end of the cycle due to the emergence of reflex arc which uses the sympathetic system to instigate a series of disruptions on the periphery. It is evident that changes induced in the local partial pressure, local venous stasis, higher capillary permeability, changing pressure throughout the microcirculatory net and at the cellular level play a decisive role in the appearance of clinical signs of the I algodystrophic syndrome. In the light of this, the treatment and application of physical procedures are intended primarily to place under control the microcirculation - the microhemodynamic component of the algodystrophic syndrome and provide for an adequate flow velocity and sufficient oxygenation. Note needs to be taken of the capacitance and capacity of the microvascular net to avoid that the treatment runs counter to the requirements and capacity of the microcirculatory net in the affected area regardless of the etiopathological possibility we have in mind. In addition to a whole arsenal of therapeutic means we use in the treatment of the algodystrophic syndrome with varying success, we also applied Vacusac to our patients. The principle governing Vacusac action is the change of pressure and sub - pressure. In other words. Vacusac creates a vacuum in a closed system accelerating thereby the blood inflow^ i e supply of nutrients and removal of metabolic products from cells. I We observed 100 patients aged 30 - 70 years, suffering from the algodystrophic syndrome of lower and upper limbs, mostly of post traumatic origin In our paper we present the results of the therapy - .relieve of the pain, improved microcirculation, oedema reduction, and higher joint mobility.

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Institution BENEFICIAL EFFECTS OF VACUSAC TREATMENT ON PATIENTS WITH MODERATE ARTERIAL INSUFFICIENCIES - A DOUBLE BLIND STUDY

Himmelstrup H., H-immelstrup B., Trap-Jensen
DEPARTMENT OF CLINICAL
PHYSIOLOGY, UNIVERSITY OF
COPENHAGEN, FREDERIKSBERG.DK

Twnty one patient with stable intermittent claudication participated in a double-blind study. After 25 treatments both groups of patients doubled their maximal walking distance. The effect was not observed under the placebo treatments. The improvement in walking distance was still significant six months after last treatment.

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VACUSAC TREATMENT OF SPORTS INJURIES

Institution Jovic D., Dotlh'c R., Institute of Physical Medicine and Rehabilitation, Medical Faculty, University in Beograd, Yugoslavia

Authors applied hypobaric therapy /HBT/ by means of VACUSAC unit in treatment of sports injuries, using vacuum /negative pressure/ of -0,05 to 0,55 BARR. There were treated the most frequent sport injuries classified in groups XII and XVII according to International Classification of Diseases. Treatments were carried out on 306 sportists, classified in 5 groups of the referenced sport activites. Sport categories are grouped as International Level /Top Sport/, National Level /Club Sport/ and Leisure Level /Recreative Sport/ and age groups of five years each. Injuries are indicated as first and repeated. Treatment success has been evaluated in three stages. Time-lag between injury and the start of therapy was noted as: a/ therapy applied immediately, b/ therapy applied within two to five days, and c/ therapy applied after five days. The procedure duration was 6-20 min. depending on the application type.

Based on the presented results, authors conclude that HBT by means of VACUSAC method effects in shortening of the sports injury treatment time, can be applied in and out-door /on sports stadium/ and it is successful no matter the age or category of the sportist. The finding is that success is more definite in case treatment starts immediately after the injury and that injuries treated as first require less treatment time in days. The authors suggest VACUSAC as a method of choice for treatment of the most usual sports injuries, no matter what sport.

Title
Authors
Institution
1

SYNDROMA SUDECK AND OTHER POSTTRAUMATIC COMPLICATIONS_LIPOVEC KAREL

ZDRAVILISCE DOBRNA

Up to now we treated more than 100 patients with sudeck syndroma mostly in the third stage. Complete recovery we got in over 80% of patients and impressive improvement in 100%. Number of treatments were from five to 20 times. Clinical signs we have followed were:

pain, oedema, skin colour, movement improvement, circulatory improvement.