POLYValk AB  
Att. Antony van der Valk  
3, Annedals Trappor,  
S-411 28 Goteborg, Sweden  
tel. 031-82 81 30

Report on clinical investigations  
of Singlet Oxygen Therapy Valkion unit use  
in sanitarium practice at Chernobyl zone in Ukraine.

Introduction.

Singlet Oxygen Therapy is widely practiced among the new perspective methods  
of non-medicametal treatment and prophylactics of diseases.  
Principle of SOT effect is based on optimization of Singlet oxygen energy formation in  
an activation chamber of Valkion unit and its delivery into a human body.  
Normalization of the patients health condition after SOT was caused by improvement  
of blood circulation, stimulation of metabolism in tissues, immunity strengthening,  
detoxyification, normalization of antioxidiant state. To put SOT into practice, modern  
Valkion Unit was set in dispensary «Teteriv», Korostyshivskiy district of Zhytomyr  
region where the above mentioned investigations have been fulfilled since the 1st of  
July 1997 till the 23rd of February 1999.

Research Object and Task.

The aim of our investigation was to determinate SOT influence on health  
condition of patients in sanitarium, and possibilities and perspectives of SOT use  
for the treatment and rehabilitation of patients with different types of pathologies.  
To fulfill the purpose the following tasks were set:  
- study the effectiveness of SOT use in clinical practice based on treatment  
  results of the patients with different types of diseases;  
- organize the comparative characteristics of SOT effectiveness among the  
  patients who received SOT in complex with other types of treatment and those  
  who didn’t receive SOT at all;  
- make the conclusion on SOT effectiveness and use perspectives in sanitarium  
  practice on the basis of clinical and laboratory data.
Materials and methods of investigation.

967 children (aged 6-15) from the region polluted by radiation were treated by means of SOT in dispensary Teteriv (table No 1). The experimental persons were divided into 2 groups. In the first group there were 455 children, who underwent complex treatment (SOT in complex with traditional treatment at the same time). Among them: 57.4% suffered from diseases of blood circulation system, 24.6% - from respiratory tract pathologies. There was following percentage according to the level of affection: light - 54.2%, middle-hard - 42.3%; hard - 3.5%.

The second (control) group consisted of 512 children, who were treated only by means of SOT. The overwhelming majority of patient suffered from blood circulation system diseases (59.0%) and respiratory tract diseases (24.6%). 55.7% of children had light level of affection, 39.6% - middle-hard level, 4.7% - hard.

In most cases the patients with cardio-vascular system pathologies suffered from the following diseases:
- functional cardiopathy,
- vegetovascular dystony.

Among gastotestinal-tract diseases prevailed:
- chronic gastritis,
- gastro-duodenitis,
- cholecystitis,
- diskinesis of bile ducts.

Among respiratory tract diseases predominated:
- chronic and obstructive bronchitis,
- bronchial asthma.

Among metabolism pathologies prevailed:
- endocrine system diseases including sugar diabetes (of light and middle-hard form).

Among motor system diseases prevailed:
- after-traumatic bones and joints injury.

Among skin diseases prevailed:
- eczema,
- neurodermatitis.

For the investigation of SOT effectiveness different data was studied: data of electrocardiogram, indices of coagulogram, hemoglobin level, sugar in blood (prothrombin index, fibrinogen), the patients tolerance to physical load was also taken into consideration.

The possible side effect was evaluated by means of the following symptoms:
- appearance of pain of different localization, which didn't bother patient before;
- intensification of disease symptoms which patient had before SOT;
- appearance or intensification of neurological stage;
- worsening of clinic-functional and laboratory indices (if they were not caused by medicament therapy).
The treatment by means of SOT consisted of activated water use and activated air inhalation. Patients received SOT 1 time a day on average. During the first day of treatment patient consumed 50-100 ml of activated water and 3-9 minutes of inhalation by activated air. The second and all the following days patients took 150-200ml of activated water and 6-14 min. of inhalation. Each patient received 11 SOT treatments on average. The duration of the treatment in the first group lasted 10 days on average, in the control group - 12 days.

**Results of the Investigation.**

When using SOT in complex with other types of treatment (table 1), all the children (455 persons) finished their course of treatment with improvement of their condition. In the control group only 451 out of 512 children (88,10%) finished their treatment with improvement, 58 patients (11,32%) left without changes, 3 patients aggravated their stage.

When treating the patients with **blood circulation system diseases**, it was noted, that general effectiveness of SOT use in the first group amounted to 100%.

The effectiveness of SOT by the patients with blood circulation system pathologies was caused by improvement of electrocardiogram indices, increase in patient's tolerance to the physical load, disappearance of heartache and tachycardia, increase in hemoglobin level in blood. SOT effectiveness in the control group amounted to 91,06%. Out of 302 children 275 persons felt better, 25 patients didn’t change their health condition, 2 children finished their course of treatment with aggravation.

The SOT applied to 112 children suffering from **respiratory tract diseases** showed considerable effectiveness.

There were several changes for better which were observed by all the patients: disappearance of catarrhal phenomenon, facilitation of expectoration, stabilization of external breathing function, reduction of short breath and quantity of choke attacks by the patients who suffered from bronchial asthma. The treatment effectiveness of the patients from the control group was 84,13%: out of 126 children 106 improved their health, 19 children (15,1%) finished the course of treatment without changes, 1 child aggravated the health condition.

The effectiveness of SOT applied to 31 child with **gastrointestinal tract diseases** was characterized by the remarkable improvement of health condition of all the patients. After SOT treatment patient’s health condition improved, pains in stomach disappeared, general state and appetite improved, meteorism disappeared, heartburn reduced, stool normalized. The SOT effectiveness in the control group amounted to 70,97%, 9 patients (29,09%) left without changes. All the patients from the first group who had **metabolism pathologies** finished their course of treatment with improvement of their health condition. There were following changes in health condition of the patients: disappearance of thirst and dryness in mouth, tiredness, reduction of sugar in blood by the patients who suffered from sugar diabetes, and loss of weight in case of obesity. By comparison, in the control group 85,71% of patient improved their health.
There was 100% effectiveness after SOT by the patients with nervous system diseases, in the control group 85.71% of patients became better.

The SOT effectiveness by the patients who suffered from skin and motor system diseases was high but didn't differ much from the results in the control group.

All the 16 persons who suffered from kidney and urinary tract diseases and to whom Singlet Oxygen Therapy in complex with other methods of treatment was applied changed their health condition for better, in the control group 91.67% of patients improved their health.

Analysis on the results of SOT use applied to the children living in the territory polluted after accident at Chornobyl Atomic Power Station and treating in the dispensary «Teterev» showed considerable treatment effectiveness. Practically 100% of patients felt disappearance of headache and also pain in joints and in chest region, improvement of general condition, increase in weight, disappearance of nasal bleeding and catarhal phenomenon in gullet, normalization of blood composition and decrease in caesium-137 level.

Inferences:
2. Effectiveness of SOT in the first group (SOT in complex with traditional treatment) was 11.9% higher by comparison with the control group.
3. Analysis on the results of the clinic research shows expediency and profit of SOT use in sanitarium practice of Ukraine treating the children with different types of pathologies from the ecologically unfavorable regions and areas polluted by radiation.

First vice-president
of the Ukrainian National Association
of Physiotherapeutists and Balneologist,
vice head of the board -
head of the medical department
«Ukrprozdrorovnytsia» JSC
M.D., Honored Doctor of Ukraine

V. Kolesnyk

TETRUM INVESTMENT INC.

MANAGER
# Effectiveness of Singlet Oxygen Therapy Use according to the Type of the main Pathology in Sanatoria of Teteriv

<table>
<thead>
<tr>
<th>Kind of the main pathology</th>
<th>Patients who underwent SOT and other kinds of treatment (I group)</th>
<th>Treatment effectiveness, %</th>
<th>Patients who didn't received SOT</th>
<th>Treatment effectiveness, %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>With improvement</td>
<td>Without changes</td>
<td>With aggravation</td>
</tr>
<tr>
<td>Blood circulation organs</td>
<td>261</td>
<td>261</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gastrointestinal tract</td>
<td>31</td>
<td>31</td>
<td></td>
<td></td>
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<tr>
<td>Metabolism</td>
<td>7</td>
<td>7</td>
<td></td>
<td></td>
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<tr>
<td>Nervous system</td>
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<td>7</td>
<td></td>
<td></td>
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<tr>
<td>Motor functions</td>
<td>9</td>
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<td></td>
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<tr>
<td>Respiratory tract</td>
<td>112</td>
<td>112</td>
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<tr>
<td>Women's diseases</td>
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<tr>
<td>Skin</td>
<td>12</td>
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<tr>
<td>Kidney and urinary tract</td>
<td>16</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>455</td>
<td>455</td>
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