Hungarian technologies and project opportunities

Date:

03.08.2022

1. Short description of technology/collaboration opportunity:

THE "AREC" THERAPY AND TECHNOLOGY
AN AUTHENTIC METHOD AGAINST

ASTHMA BRONCHIALE, RESPIRATORY ALLERGY, BRONCHITIS, KRUPP, POST COVID AND PSORIASIS

2. Detailed description:

Almost every fourth person in Europe suffers from asthma, respiratory allergy, chr. Bronchitis.

Medicines used for these diseases have very dangerous side effects: under the age of 10 they ruin the immune system of the patients.

And they don't heal, just make the patients symptom-free.

The "AREC" Therapy heals without side effects!!

The effects of the salt:

- it disperses the inflamed and adherent mucosa in the bronchioles
- it loosens the cramps of unstriped muscles of the bronchioles
- it has a bactericidal effect
- it heals respiratory diseases

The AREC Therapy has three unique attractions, that's why it is so effective:

- 1. It uses dry salt (salt-air aerosol). Salt dissolved in water can reach the bronchioles only in a very little amount.
- 2. The grain size of the salt is 0.5-5 micron. (It is finer that cigarette smoke.) Its importance is that this way the salt can get into the bronchioles.
- 3. The salt grains carry electric charge on their surface (Na++, Cl-), so the climate is partly ionized, which boosts the healing effect.

One out-patient medical attendance for 15-20 patients.

The gains of the patients are enormous: there are no seizures, no injections are needed, and they will need hardly any or no medication, there are no side effects, medication costs and sick-leave.

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3. Picture:



4. Description of picture:

Technical details:

 $\textbf{Size: } 32x32x48 \text{ cm} \quad \textbf{Electrical voltage: } 230 \text{ V} \quad \textbf{Output: } 0.65 \text{ kW} \quad \textbf{Incoming fuse: } 10 \text{ A} \quad \textbf{Weight: } 10 \text{ kg}$

Uptime: 1.5 - 2 minutes (after this, the climate is stable for 180 minutes)

The body is made of stainless steel. Accessories: microwave oven, heat resistant gloves, scoop

Duration of daily maintenance: 2 minutes. Total maintenance happens quarterly.

5. Company details:

| Name of company: | Asthma Rehabilitációs Centrum (AREC) Kft. |
|-----------------------|---|
| City: | Hajdúszoboszló / Hungary |
| Zip: | 4200 |
| Address (HQ): | Dobó István u. 27. |
| Contact person: | Dénes Bozóky |
| Designation: | Director |
| Telephone: | +36209743217 |
| Fax: | - |
| Email: | areckft@gmail.com |
| Website: | www.arec.hu |
| | |
| Established in year: | 1992 |
| Appx turnover in USD: | Below 100.000 |
| Which countries | England, Germany, Hungary |
| are you present in: | |

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6. Additional comments:

SCIENTIFIC REFERENCE:

Committee of Regional and Institutional Research Ethics of the University of Debrecen

Chairperson: Prof. Dr. Irén Horkay

Dr. Mária Szilasi Head of Clinics Docent University of Debrecen

Dr. Ferenc Gönczi Chief Physician Chief Pulmonologist in Hajdú-Bihar and Szabolcs-Szatmár-Bereg County

Committee of Regional and Institutional Research Ethics of the University of Debrecen

Chairperson: Prof. Dr Irén Horkay
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Debrecen, 27.11.2003

Expert's opinion of the Committee of Research Ethics of the University of Debrecen

The Committee of Research Ethics of the University of Debrecen investigated the following protocol at its meeting on 27. October, 2003:

Subject: Launching the AREC aerosol inhalation therapy in Budapest, Debrecen and

Hajdúszoboszló, a method used for healing certain non-specific illnesses to the respiratory system

with the help of high dispersity aerosol, under artificial microclimatic circumstances

Protocol number: (at the client) OENO 87501

(At DEOEC RKEB/ IKEB) 2104-2003

Name of consultant: Dr Ferenc Gönczi / Dénes Bozóky

Position, scientific degree: children's pulmonologist, head physician / managing director

Place of work: Paediatrics, Kenézy Hospital, Debrecen,

AREC Rehabilitation Centre Ltd, Hajdúszoboszló

List of documents investigated:

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| □x The protocol of the investigation □ Amendments to the protocol Number: Date: |
|--|
| □x Investigator's Brochure (All the pervious information connected to the method investigated) |
| The scientific CV of the consultant and the participating scientists |
| ☐ Materials and advertisements used for the recruitment of patients/volunteers |
| □x Patient's guide in Hungarian |
| □x Declaration about the voluntariness and the patients' agreement to the investigation □x Settlement agreements between the sponsor and the consultant (Indemnification, insurance.□ Case |
| reporting forms |
| reporting forms |
| □x All the previous decisions about the planned investigations of the Committee(s) of Ethics and |
| other licenser/reporting bodies (e.g.: OGYI, OKI, ORKI, ÁNTSZ etc.) |
| ÁNTSZ (National Public Health and Medical Officer's Service) license: 1624/9/1992 |
| |
| ORKI (Institute for Medical Quality Improvement and Hospital Engineering) license: |
| 93/31/1117/4 |
| |
| ☐ All the bonuses and compensations given to the members (healthy volunteers and patients) in- |
| volved in the investigation |
| The opinion of the Committee of Research Ethics on the basis of investigation of the protocol and at- |
| tached documents: |
| tuened documents. |
| □X Favourable opinion |
| |
| ☐ Favourable opinion with recommendations |
| |
| ☐ Favourable opinion with certain conditions |
| |
| ☐ Unfavourable opinion with reasons given |
| Oninion The Committee has an anglesis and advised abitation to fulfilling the already |
| Opinion: The Committee has no professional-ethical objection to fulfilling the planned investigations. According to the attached documents, the method is remarkable in healing asthmatic |
| illnesses in both children and adults. The Committee highly recommends the AREC aerosol in- |
| halation therapy considering its effect of a probably significant OEP (National Health Insur- |
| ance) saving. |
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| Members of the Committee: |
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| |
| □x Dr. Irén Horkay, professor, chairperson of KEB (Committee of Research Ethics), (Dermatological |
| Clinic, DEOEC) Dr. Attile Kies, decent, vice chairman of KER (Clinic for Internal Diseases Nr. II. DEOEC) |
| □ Dr. Attila Kiss, docent, vice-chairman of KEB (Clinic for Internal Diseases Nr.II, DEOEC) |

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| □x Dr. Pál Kádár, chairman, vice-chairman of KEB (Postabank Rt., Debrecen) |
|---|
| □x Dr. József Szentmiklósi, docent, secretary of KEB (Institute for Pharmacology and |
| Pharmacotherapy, DEOEC) |
| □x Dr. Éva Oláh, professor, member of KEB (Paediatrics, DEOEC) |
| □ Dr. Ferenc Hernádi, professor, member of KEB (Institute for Pharmacology and |
| Pharmacotherapy, DEOEC) |
| □x Dr. Géza Lukács, professor, member of KEB (Surgery DEOEC) |
| □ Dr. István Altorjay, docent, member of KEB (Clinic for Internal Diseases Nr. II, |
| Gastroenterological Department) |
| □x Dr. Miklós Káplár, associate professor, member of KEB (Clinic for Internal Diseases Nr I, |
| Department for Metabolic Diseases) |
| □ Dr. Mihály Fodor, associate professor, member of KEB (Institute for Forensic Medicine DEOEC) |
| □ x Dr. Ildikó Márton, lawyer, member of KEB (Lawyer's Office of Dr. Ildikó Márton, Debrecen) |
| □x Ilona Simon, head nurse, member of KEB (Head Office, DEOEC) |
| □x Mrs Katalin Kálmán, teacher, member of KEB (Vocational School of Arts and Handcrafts) |
| □x Major Gy. Pius Roman catholic priest, member of KEB (Dominican Parsonage St. László, |
| Debrecen) |
| The Committee operates according to the EÜM (Ministry of Health Care) order 23/2002(V.9) and |
| 24/2009(V.9), and its rules meet the requirements of GCP-IHC regulations. |
| Important Information: |
| 1. The consultant is obliged to inform the Committee after the beginning of the investigation about all |
| the serious and unwanted events that can influence the safety of the investigated people or the |
| procedure of the investigation, and also inform the Committee about any amendments or changes to the protocol. |
| the protocol. 2. After finishing the medical investigations, the client is obliged to send an evaluation report to the |
| Committee of Research Ethics. |
| 3. In case of medical investigations, the Committee of Research Ethics is making a continuous re- |
| examination. The consultant is obliged to send a written report to the RKEB at the given date, unless |
| he receives a previous notification about the local inspection. |

Date of written report: June 2004

Local inspection can happen at any time after an agreement with the client.

The Committee member (independent doctor) appointed by the RKEB to control the investigation: Dr. Ferenc Hernádi, professor, member of KEB (Institute for Pharmacology and Pharmacotherapy, DEOEC)

Tel: +36-52-411-717/4495

Dr. Irén Horkay Professor RKEB Scientific Director of DEOEC Dr. Pál Gergely Professor Chairperson of DEOEC

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Dr. Mária Szilasi

Opinion about the AREC therapy

Cave therapy is a unique method on the wide palette of medical science. This treatment has probably the least explainable way of healing effect.

Cave therapy must have an important place in treating illnesses to the respiratory system.

According to our present knowledge, asthma and bronchitis cannot be cured with traditional therapies; medicines can only help lessen the symptoms.

On the basis of our experience up until now, cave climate therapy can be regarded as a natural method without any side effect.

Descriptions about healing caves have been available since the Middle Ages, but the scientific research of the method was started only in the fifties in Germany.

The air of the cave not only has constant temperature, humidity and a high concentration of carbon-dioxide and radon, but also contains Ca and Mg ions and a dozen of other trace elements in the form of aerosol.

It is almost perfectly dust- and germ-free, pollens can only occasionally be found in this air, its cleanness is beyond the regulations of operation halls.

With a view to a therapy, the unusual environment without disturbing stimuli should not be ignored.

During the therapy, pathogens getting into the air of the cave function as condensation seeds in the almost saturated air, consequently they are deposited almost immediately to the floor, making the possibility of the reinfection little.

During the AREC therapy an artificial climate is produced based on the more than 20 years of cave therapy experience in Aknaslatina, which is an environment produced with a suitable device ("salt mill") copying the microclimate of salt mines in a closed room ("chamber").

Patients can enjoy the healing effect of the salt climate in this chamber.

Due to this therapy, the patients' condition got better, the symptom-free periods became longer; the therapy is without any side effects, still an effective method.

Dr. Mária Szilasi

Head of Clinics Docent University of Debrecen

Dr. Ferenc Gönczy

Experiences with the Therapy

We have been practising this method since 1992.

During this time approximately 350 children and 800 adults took part in the therapy. Our experiences are really favourable. Outstanding is the fact that before the therapy 50 % of the children had to get injections because of seizures, whereas no injection was needed for a period of one year after the therapy. In the following one year the need for medicine sank by 57.5%, the rate of tough breathing sank by 70-80% and the number of sick-days per person decreased by an average of 10.9 days. 80 % of the children taking part in 3 courses of treatments with a one-year break between each have become symptom-free on a long term. With elderly patients the treatment could lead to a 10-12-month-long significant remission.

In 1995 we though an objective survey of the effects of the therapy be necessary, so we asked head physician Dr. Ferenc Gönczy, chief pulmonologist in Hajdú-Bihar and Szalbolcs-Szatmár-Bereg County to examine and evaluate our therapy. The results of his retrospective survey are published in the following:

January 1995

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AREC-Therapy

Retrospective survey of the effects of the "salt chamber" therapy

The therapy can be applied on patients with chronic respiratory diseases.

The nature of the therapy: with the help of a suitable device (salt mill) a climate similar to that of salt mines are reproduced in a closed room (chamber). Patients can enjoy the positive effects of the salt climate while staying in this chamber. The AREC (Asthma Rehabilitation Centre) Ltd. was founded in Hajdúszoboszló on 5th November 1992 with the help of the patent of medical scientists and on the basis of the more than 20-year long experience of the Solotvyno cave therapy. The treatment of patients already began in that month.

After the positive personal and, of course, subjective experiences it seemed necessary to make an objective survey on the effects of the therapy, not only to reassure ourselves but also to plan further ahead. We considered the questionnaire the best method to gather data. We sent out forms to those patients having taken part in the therapy who had finished the treatments at least 8 months before, so there was a long enough reference time to receive reliable data.

Although it is still subjective data, but at the beginning of the therapy all the patients were offered a free course of treatment in case of the ineffectiveness of the first series, but no one has used this opportunity so far.

The questionnaires were sent to 53 patients, 41 of them filled it in and sent it back. (77.4%)

Breakdown by sex and age: 17 female (8 children aged 5-15; 9 adults aged 18-55)

24 male (17 children aged 4-15, 7 adults aged 40-75)

The period examined was between December 1992 and January 1994.

The questionnaire contained 8 questions. Patients had to evaluate the number of seizures, the severity of tough-breathing, the number of injections because of the seizures, the duration of the seizures, the medication, the presence of phlegm, the number of sick-days and the changes of these data after the therapy and at last the patient's (in case of children the parents') opinion about the effects of the therapy. These patients were registered together with their medical prescriptions. The division according to the diagnosis was the following:

Asthma Bronchiale - 27 patients (7 girls, 5 women, 14 boys 1 man)

Bronchitis chronic – 8 patients (1 girl, 2 women, 2 boys, 3 men)

Rhinitis allergy – 5 patients (1 woman, 1 boy, 3 men)

During the evaluation we did not consider the answer of the female patient who has been suffering from eczema from her birth and who said: "I have taken part in the therapy to improve my condition." She, of course, did not write the followings to answer the questions in the survey: "I can experience a 3-4-month long remission after the treatments (which could only happen after a 2-week seaside holiday)", and since the therapy my outer symptoms have been less severe."

In the table attached we summarized the answers given to the questions. It shows that because of the therapy, there was a significant reduction both in the number of seizures and in the severity of tough-breathing. The duration of seizures, the number of sick-days sank and the patients needed less medicine.

The last statement is well-marked by the reduction of injection treatments. The patients and the parents – with the exception of 3 patients (2 boys, 1 man) – reported a significant remission; what's more, 14 out of the 37 patients showing improvement remained symptom-free during the reference period.

The breakdown by sex and age shows that the biggest improvement can be observed at male children. If we take diagnosis and severity into account, we can state that the best

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result can be achieved with mid-severe and slight asthma and rhinitis. It is obvious that the effect cannot be evaluated on the basis of the answers the only eczema patient, although the report of this patient can urge us to further research.

The evaluation of the survey also shows that during the "AREC"therapy the thousand-year long experience of salt mines can be observed. It does not have any side effects, it is harmless in the suitable indication, and it is still an effective and a real natural healing method – not in the pejorative sense – that is why it is worth going on with the treatments and the research.

Dr Ferenc Gönczy

Chief Physician; Chief Pulmonolgist in Hajdú-Bihar and Szalbolcs-Szatmár-Bereg County