tritico proveniente dalla superficie esterna sul fondo della cavità. Tale momento corrisponde, forse, all’esterno alla formazione della conoide di deiezione che è presente nel tratto inferiore del Vallone Sorrencello e nella sottostante piana.

IVª fase - Un ulteriore approfondimento del livello di base, ma di piccola entità, come si evince dalla incisione dei depositi costituenti la conoide prima menzionata, non deve aver modificato sostanzialmente la morfologia gravicolastica della cavità anche se ha sicuramente ridotto il regime delle acque circolanti.

BIBLIOGRAFIA


Silvio di Nocera

HISTORY OF EUROPEAN SPELAEA THERAPY WITHIN THE I.U.S.

Pubblichiamo il testo della relazione per la speleoterapia tenuta al Congresso Internazionale in America nel luglio scorso.

This history is surely well known by European scientific world; on the contrary, in America speleotherapy is still nearly unknown. Therefore, it is important and very interesting to present here its evolution.

First of all, it is necessary to underline that speleotherapy, within its field of research, engages fellows of very different cultural origin, as physicists, chemists, biologists, doctors, etc., whose common denominator is to be from longtime speleologists, well before the beginnings of their professional activities. Starting as amateurs of mountains and cavities, then they put their professional knowledge at disposal of speleology.

We like to emphasize this point for doctors, because often people wrongly think that the specialization in speleotherapy follows the degree!

It is by the meetings of physician speleologists, not by the meetings of speleological doctors, that in Czechoslovakia aroused the foundation of the speleotherapeutic section within the I.U. S.! Which is the origin of speleotherapy? During the 2nd World War the forced permanence in caverns (air-raid
shelters) showed that some sickness get better, in certain cases were defeated. The same thing was observed for the miners in Poland, Hungary and Austria. From these experiences started the study of the cavities environment and the scientific analysis of the results.

The experiences were carried out either in fresh or in cold cavities: in the former were treated respiratory and heart deseases, in the later arthritic-rheumatic and hyper-uricaemic deseases.

Thanks to the initiative of czechoslovakian researchers, in may 1968, came together in Kosice, at a meeting on spelaeotherapy, experts of different countries: Eastern and Western Germany, Bulgaria, Austria, Romania, Hungary and Czechoslovakia. At this time the results of experiences and studies on the spelaeoclimate and the use of grottos in medical field were exchanged.

For instance, the exhaustive work on the Klutert grotto (Ennepetal, Westfalia), the first results on Friedenshöhle (Agtelek, Hungary) and the first observations on the Gombasek grotto (Eastern Slovakia) were presented; moreover, the success in the treatment of some deseases, notably respiratory deseases, by the stay in cavities was pointed out.

The first thing that arised was the necessity of a closed collaboration between spelaeometeorologists and spelaeotherapists, and that of an international coordination of researches. The members of the meeting decided to demand to the I.U.S. the constitution of a special Permanent International Commission for the Spelaeotherapy. According to the statute the request was introduced to the General Assembly of the I.U.S. at the 5th International Congress of Spelaeology (Stuttgart, 1969). After the agreement, the Assembly chose unanimously dr. Hermann Spannagel (Ennepetal) for President and dr. Hubert Kessler (Budapest) for Secretary of the International Commission of Spelaeotherapy. Its task was outlined as follows:

— trend and co-ordination of a regular collaboration among the different sectors of spelaeology;
— management of the press activities and publications exchanges;
— organization of international activities, work programs and meetings concerning spelaeometeorology and spelaeotherapy.

In 1971, by the slovakian cavities Administration of Liptovsky Mikulás, was presented the first monograph concerning the systematical researchs on the possibility of climotherapy in the Gombasek grotto. The same year, on september, was organized the 1st International Symposium of Spelaeotherapy near the Klutert grotto in Ennepetal (GFR). There, the successfull treatments of patients in hungarian, czechoslovakian, austrian, french and west-german cavities were reported.

During the final session was stated:

— to continue and increase works;
— to improve, on an international basis and with joint methods, the researchs made in geological, micro-climatical, physico-chemical and medical fields;
— to diffuse, close to medical organizations of one's own district, the basic ideas on spelaeotherapy;
— to demand to the Authorities of one's own region a financial aid for the achievement of scientific researchs and for a very small local assistance to the patients.

During the 2nd International Symposium of Spelaeotherapy, held in Budapest on sept-oct 1972, was emphasized the very fruitful work resulted of the collaboration of two groups of persons of very different formation: spelaeologists and doctors.

Since was observed that in tunnels of different kind the climatic conditions — natural ventilation, moisture, temperature, etc. — were similar to them of cavities and was then possible to compare, was stated that studies on «tunnel-therapy» were included in the sphere of the activities of the International Commission of Spelaeotherapy. The resolution of widening the ambit of «cavities science» by taking into account also the mine industry, was very important for the development of spelaeotherapy. It was so possible to compare «thermal grottos» and «thermal tunnels», and also to use low temperature cavities and headings.

The 3rd International Symposium of Spelaeotherapy was convened on oct. 1974 in Badgastein (Austria), where was already working the «therapeutic tunnel» of Böckstein. This is a thermal tunnel lying in the district of the famous gold mine of Mt Radhaus, in the Tauern. The Symposium was sponsored by Health Administration and City of Badgastein, and very interesting discussions took place among members, notably on the presence of radon in the microclimate. The next meeting of the members of Commission and researchers interested to the problems of spelaeotherapy was convened, en may 1976, in Horný Hráдok (CSSR), during the 4th International Symposium of Spelaeology. The Secretary dr. Kessler communicated that in the Commission were represented the following countries: Austria, Bulgaria, Czechoslovakia, France, West Germany, Italy, Yugoslavia, Poland, Portugal, Romania, Spain, Hungary. In certain countries the spelaeotherapic methods were admitted by law, as in USSR, Hungary, Romania, Poland, Bulgaria and Austria. In the final session was stated to invite OMS to designate its delegate into the International Permanent Commission of Spelaeotherapy.

In the 5th International Symposium of Spelaeology, held in Oberzeiring (Austria) in oct. 1978, appeared necessary to gather in a book the different articles, monographs, etc. published in a scattered way. Another problem tackled in this meeting was that of the effective conditions in which the instruments work in a hard environment, rich in RM, without MP, etc.

In sept 1979 an International Extraordinary Symposium of Spelaeotherapy was convened in Ennepetal, on the occasion of the 25th year of the Kluter grotto, the cradle of Spelaeotherapy.

Poland, with its allergology clinic unique in the world, pointed out a new curative method, the subterranean-therapy. In the salt mines of Wie-
liczka were treated more than 5000 patients coming from 21 countries.

USSR, USA, Bulgaria, Romania, Finland, Turkey, Vietnam, Hungary, sent a representative of doctors of the Health Ministry as observers. Let’s talk now about Italy.

Its introduction in the field of Speleotherapy occurred on the rebound of the Congress of Speleology held in Olomouc (CSSR) in 1973. Since that time foreign researchers appeared very interested to our thermal cavities, notably to the Monsummano grotto, one of the oldest European therapeutic cavities. The scientific research was here very discontinuous, as showed in bibliography.

It is only in the last 5 years that studies on microclimate and human physiopathology in cavities began again, thanks also to the collaboration of the universities of Florence and Naples. During the observations on microclimate temperature, gases and vapours, aerosols, ions and pH, moisture, change of air, pathogens and allergens, radioactivity, electric conductivity were measured; in the same time a number of controls on patients in cavities were conducted by spirometric, electrocardiographic, photoplethysmographic, bio-aesthetic tests.

A report of these studies will be published in the acts of the 6th Speleological Symposium of Monsummano (Italy).

Symposium held until now are:

1971 1st Symposium
Ennepetal West Germany

1972 2nd Symposium
Budapest Hungary

1974 3rd Symposium
Badgastein Austria

1976 4th Symposium
Horny Hrádek Czechoslovakia

1978 5th Symposium
Oberzeiring Austria

1979 extraordinary Symposium
Ennepetal West Germany

1980 6th Symposium
Monsummano T. Italy

At the end of each Symposium the organizers collected all the papers, only a part of which unfortunately is in our hands.

We hope to complete the collect in a short time, if we will receive a valid aid to our efforts.


Reports are part of «Communications of applied Speleology Section, sub-section Fb: Speleotherapy and sports-medicine».

This fact corroborate all we said about spelaeologist doctors!


— Mascarilla contra el Histoplasma capsulatum
Eduardo Castro Ruiz México

— Natural noise levels in caves
Arpad K. Cseko Hungary

— Die speleologische Therapie in der Höhle von Gombasek
Karol Klincko CSSR

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— Die Wirkung unterirdischer Kur in Salzgruben von Praid (S. R. Rumänien) auf den Krankheitsverlauf der Astmatiker, Beobachtungen bei 160 Fällen
B. Palfy und a. S. R. Rumänien

— Etude du comportement de l'homme en milieu souterrain
Pierre Saumande France

— Speleo-climatic treatment at respiratory allergic disorders at children
Sibila Timova Czechoslovakia

Symposium of Speleotherapy and Speleomedicine 1976


— K. Klincko: Die Methode der Speläotherapie chronischer unspezifischer Erkrankungen der Atemwege in Karsthöhlen.


— Kövesi Gy and a.: The role of Speleo-therapy in the cure of chronic obstructive lung disease.

— Dusan Kubiny: Einfluss der Strukturturktonischen und geochemischen Verhältnisse auf die Dynamik und das Mikroklima von Höhlen.


— H. Schmidt: Pilotstudien zur Kluterthöhlenwirkung.


— L. Blaha: Höhlen in der Slowakei und ihr Schutz.


— S. Timova and a.: Einfluss der speßekoklimatischen Behandlung in der Höhle Bystra auf rezidivierende und chronische respirationsleiden bei Kindern.

International Symposium of Speleotherapy in Oberzeiring, Austria

— K. H. Spannagel, Ennecktal-Deutschland
 Die Speläotherapie.

— H. Schmidt, Ennecktal-Deutschland
 Zur Wirksamkeit des Kluterthöhlen-Besuches bei der asthmatischen Bronchitis.

— H. Kessler, Budapest-Hungarn
 Zielsetzung und Tätigkeit der Kommission für Speläotherapie mit Besonderem Hinweis auf die Ionisationprobleme.
— I. Meszaros, Tapolca-Ungarn
Über 5 jährige Erfahrungen mit Speläotherapie in der Kurhöhle von Tapolca.

— S. Roda, L. Rajman, Roznava-Tschechoslawakei
Die Entwicklung des elektrischen Messens von nichtelektrischen Grössen in der Speläotherapeutischen Forschung.

— A. Jancarik, Praha-Tschechoslawakei
Berechnung klimatischer Bedingungen in einer Höhle.

— M. Skulimowsky, Wieliczka-Polen
Entwicklungsprobleme der Subterraneotherapie.

— H. Welser, Böckstein-Austria
Neue Beobachtungen in den Bergsturzgebieten des Gasteinertales.

— G. Hasenhüttl, Graz-Austria
Die Möglichkeit künstlicher Nachbildung der therapeutischen Faktoren in Heilhöhlen.

International Extraordinary Symposium of Speleotherapy: Ennepeetal.

— K. Werdermann, West Germany
Therapie des Asthma bronchiale.

— K. H. Spannagel, West Germany
Bericht über 25 Jahre Kluterthöhle Ennepeetal.

— H. Hille, West Germany
Referat.

— G. Hasenhüttl, Austria
Die Stellung der Speläotherapiein einer umfassenden Asthma-Behandlung.

— M. Skulimowski, Polen
Morbus asthmaticus. Neue Theorie (Zur Frage der Subterraneotherapie.

— Halina Skulimowska, Polen
Die Geschichte der Subterraneotherapie.

— M. Skulimowski, Polen; S. Sliwinski, Polen
Kardiologische Subterraneotherapie.

— H. Malota, Tschechoslowakei
Asthma bronchiale - Indikation für Speläotherapie.

— H. Kessler, Hungary
Staatliche Anerkennung und Unterstützung der Höhlentherapie in Ungarn.

— J. Tardy, Hungary
Neue Möglichkeiten der Speläotherapie in Ungarn.

— I. Fodor, Hungary
Die mathematisch-statistische Analyse der klimatischen Bedingungen der Speläotherapie.

— M. Kichknopf, Hungary
Zwanzig Jahre Speläotherapie in der Friedenshöhle (Ungarn).

— T. Horvath, Hungary
Erfahrungen mit der Höhlenklimatherapie in den Heilgrotten von Tapolca auf Grund der Ergebnisse an 1.000 Patienten.

— A. Piciocchi / F. Utili, Italy
Einige Nachrichten über die Speläotherapie in der Monsummano-Höhle.

— B. Palffy and a., Hungary
Die Häufigkeit und die Rolle einiger Risikofaktoren in der Pathogene nese chronisch obstruktiver Bronchopneumopathien bei den Bergleuten der Salzgrube von Praid (Rumänien).
— B. Palfy and a., Hungary
  Doppelblinduntersuchungen der adrenergischen und cholinergischen Bronchialreaktivität bei Asthmakern während der Kur in der Salzgrube von Praid (Rumänien).

Even if each Country, mostly in Eastern Europe, follows its own research pattern, every Symposium has recorded the advancement of knowledge about either environment chemical and physical data or behaviour of the patients treated by séances in the grottos.

The great number of patients visiting grottos and the statistical data on therapeutic effects gives a positive budget of the activities in this field of speleology.

Dozens of thousand of people yearly frequent hungarian, czechoslovakian, german, austrian grottos and also the italian grotto of Monsummano.

Any person interested in having more detailed informations will find in Naples (c/o CAI - Maschio Angioino - 80133 NAPLES) a Center for Informations and Data Bank.

Our wish is that America too have in the future its therapeutic grotto!

Csekö K. Arpad
Walter Gressel Austria
Alfonso Piciocchi Italy

IN UNGHERIA SUL LAGO BALATON NELL’82 PER IL PROSSIMO SIMPOSIO DI SPELEOTERAPIA

RIASSUNTO

Per il 1982 si organizzerà in Ungheria il VII Simposio Internazionale di Speleoterapia. Per l'occasione si presenta un panorama speleoterapeutico del Paese: studiosi ed esperti di speleoterapia, grotte curative e relativa bibliografia.

ABSTRACT

The 7th international speleotherapy Symposium will be held in 1982 in Hungary. A presentation is made on this occasion of the speleotherapy situation in the country; scholars and experts on speleotherapy curative caves and relevant bibliografy.

Ci è giunta da qualche giorno la notizia, da parte del dr. H. Kessler, che per il 1982 si organizzerà in Ungheria il VII Simposio di speleoterapia. In tale Paese, nel 1972 si svolse il II Simposio Internazionale a Budapest: questa volta la sede prevista sarà presso il lago Balaton, a Tapolca, dove ha sede un ospedale con annessa una grotta terapeutica.

Nell'occasione, ci è grato presentare ai nostri amici lettori l'attuale panorama speleoterapeutico d'Ungheria.

Dal nostro schedario internazionale rileviamo: