

Speleotherapy in Hungary Today

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It is written in the ancient Indian epic, the Ramayana, that Rama — deadly fatigued from the chase after the kidnappers of his wife, Sita, in the forests of the Vindhya Range — took refuge in a cave. Breathing in the balsamic cave air and gulping the crystal clear stream water, he and his companions regenerated very quickly and could soon resume their chase, successful in the end.

This is perhaps the earliest evidence that man recognised and utilized the beneficial and curing effects of cave microclimate even in ancient time.

From medieval Hungary we also have written documents testifying to the relationship between caves and the treatment of illness. They inform us about the wide-spread application of bone remnants in cave fills, powdered dripstones, cave waters and the climate of certain caves for medical purposes. The 'sweating' cave of Szklno or Torja became popular places of pilgrimage not only for people of the area suffering from diseases, but their medicinal influence was also known all over Europe (Tardy, 1984).

While in caves with sulphuric emanations and radioactive influence the treatment of chronic locomotional, dermatic and neurological diseases looks back for centuries, World War II represents a turning-point, in the medical utilization of caves with comfort or cooling sensation. In post-war years systematic climatological and medical observations began initially in the Klutert Cave, Ennepetal, West-Germany, in order to confirm the common experience that the condition of people suffering

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from asthma, bronchitis or whooping cough tends to improve after some time spent in caves.

The news about promising results and reliable statistics had reached Hungary by the late fifties and gave impetus to the experiments which started at the beginning of the decade.

The Beke Cave of Josvafo was discovered by Jakucs in 1952. The climatological measurements, conducted by him, BIRO and FAZOLD, proved that climate here was very similar to that in the Klutert Cave, already a basis for reference. JAKUCS called the attention of physicians to the fact that more and more asthmatic patients visited the cave, in spite of the inconvenience and risks, and they insisted that their complaints had reduced here. The obvious demand, the enthusiasm of fanatic people and the practical help from the Borsod Collieries Trust led to introduction of speleotherapy in Josvafo and, thus, in Hungary.

Experimental treatments began in 1959. The leading figure of these attempts was Kirchknopf, who involved Varjas and Kraszko, relying on the technological background of the nearby hospitals, into the medical research. Kirchknopf persuaded the Borsod Collierie to provide the necessary conditions (developing the cave to accommodate patients and building overnight facilities) and, with Szoboszlay and then Adorjan, undertook the selection of patients (Kirchknoph, 1985). Since 1965 organised treatments have taken place and the results have been analysed scientifically (Kraszko—Jonas—Szoboszlay, 1973). The chemical and bacteriological investigations conducted for many years by Takacs (1982) and his coworkers, which supplied the basis for curing diseases, are also to be emphasized. The Ministry of Health declared the cave a medicinal one in 1969 and this marked the acceptance of speleotherapy of and this marked the acceptance of speleotherapy

officially as a way of medical treatment — unprecedented in the whole world.

The cave is still run by the Borsod Collieries. The patients are mostly miners, who are accommodated in a seasonal resort for 46 persons. There are six sessions a year and permanent medical supervision, previously a major deficiency, seems to have been ensured recently.

Between 1969 and 1988 a total of 8232 patients received a three-week treatment (four hours daily); half of them were manual workers, the other half consisted of intellectual workers, the other half consisted of intellectuals, pensioners or children. The latter have formed one group each year since 1981 and are recruited from the patients of Centre for Child Hygiene in Miskolc. Most of them suffer from chronic bronchitis and bronchial asthma. By subjective judgement, patients reported considerable improvement and for a high percentage the medicine demand was reduced. this percentage the medicine demand was reduced. This positive trend could be supported by objective parameters (breathing function tests). The observations on the rehabilitating value of repeated cures are important as they attest to deceleration of disablement (Adorjan, 1988).

The activity going on at Jószafo is a pioneering venture. This is the place where speleotherapy was first put into practice in Hungary and thanks to it speleotherapy was officially accepted by health authorities. The methods for the scientific evaluation of results were also elaborated here. The investigation which proved that the pathological hypersensitivity of bronchia decreases in the cave environment proved that the decreases in the cave environment (Kraszko, 1983) is still unique in the world. Their contribution to the international respect enjoyed by Hungarian speleotherapy is great.

A negative phenomenon is the only seasonal use, the lack of a hospital

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background, narrowing down both supervision and the complexity of medical supply.

In the second half of the sixties speleotherapeutical activities began in two additional localities, at Abaliget and Tapolca.

The curing effect of the Abaliget dripstone cave was known in the circles of the local population suffering from respiratory diseases since the forties or fifties. The despiratory diseases since the forties or fifties. The detailed climatic mapping of the cave is the work of Urban, Pater, Szabo and, most of all, Foder (1969, 1977). Under the professional supervision of the Pulmonological Institute of the Baranya County Hospital and sponsored by the Baranya County Hospital and sponsored by the Pecs Ore Mines, organised treatment here began in 1971. Groups of 20 people spend two hours daily in the cave for four weeks and hygienical gymnastics is also part of their treatment in the pulmonological institute and the curing is accompanied by continuous medical supervision.

Since 1980 2,000 patients have been treated, including those suffering from silcosis Subjective improvement is observed for a considerable percentage of patients and for half of them the reduction of the amount of medicine demanded also supported of the amount of medicine demanded also supportion of the amount of medicine demanded also supported this feling (Kovesdi-Haber-Bor-siczky, 1976 ; Scureiner, 1988).

In some respects the activities at Abaliget are also pioneering. Partly the intention to provide a satisfactory professional background and correct preliminary examination and partly the initiative that hygienical gymnastics should be included into speleotherapy.

The difficulties partly arise from the large distance between the background

institution and the cave and partly from the quarry is shared with tourism.

In 1969, relying on Kessler's (1972) climatological measurements, experimental treatments began at Tapolca, in the Lake Cave. After the first successful years a decision was made to organise this activity on a regular and broader basis. For this purpose the dry cave under the hospital was developed. It had excellent climatic potential and allowed the establishment of an organic link between a cave and a hospital. Thus, under satisfactory professional supervision, the conditions for the regular and scientific evaluation of results were created. Here cave climate is a useful component of a complex respiratory rehabilitation activity and also an optimal setting for this activity. Speleotherapy has been integrated into the complex medical treatment in the hospital. Since 1973 curing is regular (lasting for three weeks with four hours daily) with 24 patients taking part. In 1976 an independent hospital department was set up with its main profile being speleotherapy. The development of the cave and the outfitting of the hospital department were subsidized by the Bakony Bauxite Mines Company, the Hungarian Aluminium Industry Trust and employed in these branches of industry. At Tapolca speleotherapy is a complex activity with breathing exercises, autogenic training, psycho- and musicotherapy in the cave and other, nonspecific ways of treatment, such as electro- and phototherapy, vertebral exercises, inhalation, outside the cave assist the improvement of patients' health, supplemented by medicine. An enthusiastic group of specialists forms the staff. The merits of Somogyi were great and since 1976 the department has worked under the guidance of Horvath.

Over the last 15 years about 6,000 patients have been treated and a considerable percentage return regularly. The overwhelming majority of patients shows prolonged improvement, their demands for medicine, sickness benefit and

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hospitalisation are reduced and their respiratory function improved. The rehabilitation value of regular medical care could be validated through the delaying of the inability to work. It could also be confirmed that the complex respiratory rehabilitation under cave conditions had numerous advantages against passive climatic therapy or conventional hospitalisation (Horvath-Somogyi-Meszaros, 1979, Horvath, 1980, 1981, 1984, 1986).

In recent years the activity of hospital was broadened to include the continuous care of local children suffering from asthma. The psychical and physical practices learned and regularly repeated in the climate of the cave are of utmost importance. The results are very promising and this activity is becoming a national service and the social and professional responses are favourable.

The work going on in Tapolca presents a model in several respects. Speleotherapy is the only independent institution in Hungary where speleotherapy is the main profile. This is the only cave-hospital complex where professional background, comprehensive care and the monitoring and evaluation of results are accompanied by a comfortable sanatorium life and resort setting. Speleotherapy introduced a series of related activities (care of children, medicinal tourism), which are profitable, in addition to the treatment itself, for both the town and the country. The department did much for the acceptance of this way of treatment by the professional public in Hungary. It is primarily due to the results achieved here that speleotherapy is accepted in the Hungarian and international medical forms. There are great merits in the international respect for Hungarian speleotherapy. Since 1986 Horvath is the president of the UIS Committee on speleotherapy. If we are not so modest we may say that all other activities around the world are measured to the Tapolca example.

Besides the three currently active cave there have been other plans and attempts to this activity and to begin speleotherapy at other localities. For a quarter of a century Kessler (1982) has been making efforts to use the Molnar Janos cave and the drift in the Gellert hill for medical purposes. Osyath gathered favourable experience concerning the curing of asthmatic children in the Palovolgyi Cave. Mucsi (1987) experience the microclimate of the Hajnoczy Cave and a positive influence on the respiratory functions of healthy people. There have also been attempts to utilize the Szemlo-hegy Cave for health tourism. Although these ideas, have not yet been realized, the blame cannot be totally put on the lack of fundamental climatological research aimed at the prospects of the utilization of these caves for therapeutical purposes. The re-searches by fodor (1981) and gadoros (1988) are of great importance. The recent investigations by Tareat importance. The recent investigations by Tardy and his coworkers concerning the climatology and bacteriology of caves help to define the term 'medicinal cave' and may mean a revolution in the theory and practice of speleotherapy (Bolner-Tardy, 1988, Tardy, 1987, 1988). However, it must be considered whether the restricted resources available for health service, including speleotherapy, should optimally be concentrated on the support, maintenance and development of the now active localities or be used to broaden our activities to cover new facilities.

Speleotherapy as a kind of medical treatment is now judged in Hungary in a rather ambivalent manner. Patients demand it and the opinion of the medical profession ranges from full approval to total rejection. Manifold dependencies and technical equipment. Manifold-ency has both positive and negative effects, as speleotherapy belongs equally to the Hungarian Speleological Society, the Ministry of Environmental Protection and Water Management as well

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as to the Ministry of Health and Social Affairs, but work at given localities directly affects settlements and industries and even tourism in certain places. This circumstance may multiply opportunities and may also open a way to shift responsibility and tasks.

Hungarian speleotherapy is respected internationally. During recent years more than 60 publications have appeared on this topic written by Hungarian authors, in Hungarian and foreign languages. The number of lectures by Hungarians in speleotherapy at conferences at home and abroad surpasses a hundred. Hungarian experts take part at all international conferences on speleotherapy. Patients in the Tapolca Cave (Photo : Z. Sandor) and their contributions are significant. Since its formation the UIS Committee on Speleotherapy has had a Hungarian secretary general (Kessler) and, as has been mentioned, a Hungarian president for two years.

Nature provides good opportunities for the rehabilitation of respiratory diseases, increasing in number in Hungary. There are still many unused potentials in our medicinal cave and the related potentials in our medicinal caves and the related medical facilities. The exploitation of this potential in medical tourism may open up new perspectives and the income could be used to develop new caves for the of medical treatment.