

TO THE HISTORY OF HYDROTHERMOTHERAPY: PAGES OF HISTORY

Do historii wodocięplolecznictwa: strony historii Samosiuk IZ^{1,2}, Orzheshkovsky Vas.V¹, Zukow W², Sikorska A³

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Summary

Hydrothermotherapy - one of the oldest methods of physiotherapy.

Słowa kluczowe: historia, wodocięplolecznictwo.

Streszczenie

Wodolecznictwo jest jedną starodawnych metod fizjoterapii.

"The history of science is science itself" by JW Goethe.

Part I. Pages of history

Część I. Strony historii

1. Ancient Period.

Hydrothermotherapy - one of the oldest methods of physiotherapy. You can quite agree with NV Sletov who in 1928 wrote that among all the physical methods of hydrotherapy, of course, ranks first in its antiquity, the recognition of the usefulness of all peoples and all times, in the earliest extant passages of history humanity, water has always been considered a symbol of purity and cleansing. Earth's first city, built over 7 millennia ago in the Jordan River, considered to Jericho (which means "city of dates). During the archaeological excavations of his (the first excavations were carried out at the end of XIX century Russian expedition) along with many historical relics was discovered a marble bath with a heating system, with the adjoining bedchamber, the floor was paved with mosaics depicting the tree of life. During excavation of the Indian city of Mohenjodaro, which existed 5,000 years ago, were found the ruins of baths, pools and shops, which sell drinking water. English archaeologist, D. Evans during the excavations conducted on the island of Crete near the present city of Heraklion, discovered the ancient city, which had existed for a thousand years before the rise of ancient Greece. In the ruins of this city he found and explored, along with other attributes of civilization, bathrooms, swimming pools and baths even more fashionable than Mohenjodaro.

1500 BC in the Hindu book of the Rig-Veda ("science of life") provides guidance on the use of water for therapeutic purposes, inter alia, recommended bathing in the sacred waters of Ganga and others Gaspereau Dee leads a brief excerpt from the book: "Healing water flow, water cools the heat of a fever, it is curative of all diseases, cure brings you over the water. " The Indians used the bath as a diaphoretic for colds, and they believed that the baths help with consumption and all diseases related to malnutrition. The special role they have played seawater. It is known that Euripides, accompanying Plato was ill in Egypt, and only through diving into the sea recovered.

The Egyptians, Babylonians, Assyrians and Jews use water for hygienic and medical purposes, couching it in the form of religious ritual. The custom of washing hands and feet, as well as the purification of body water was distributed to almost all nations of the ancient world.

Since ancient times, various peoples (Phoenicians, Aztecs, Chinese, Sumerians, Chaldeans, Vikings, Persians, Scythians, Slavs, etc.) enjoyed a sauna. Herodotus visited Egypt, Syria, Babylonia, on the territory of Ukraine, which at that time lived Scythian tribes, and in 450 BC. er. described in detail the bathing habits of many people, in particular, the Scythian baths (cited by W. Fritzsche, 1978). In VI century BC. er. Pythagoras, the world famous.

Greek scholar and an athlete (the winner of the Olympic Games for wrestling) believed that the heat - the source of life, lives all that warms warmth. He highly appreciated the bath procedure, attaching thereto countrymen, and said that "nothing is more joyful and useful to them." Pythagoras even specially went to Egypt where he studied in

detail the technique of hydrotherapy baths and a device and then implemented their knowledge in their homeland in Greece.

In Sparta, the cold water has been widely used for hardening and treatment. Ancient Greek historians believed that the first built in Greece in his bath Spartans (lakedomonyanes), hence the name of the baths in Greek - "lakonikums. The remains of ancient baths have survived and we have (in Ukraine and Russia). Thus, among the ruins of an ancient Chersonese were found: the bed of an ancient aqueduct, a pool, bathhouse with mosaic floors, bathrooms. On the Taman peninsula and in the Kerch found the ruins of ancient buildings with therapeutic baths. In Anapa were found a bronze strigelya with handles that Greek athletes were cleaning the body. In Homer's *Odyssey* under the name "Bay listrignonov" described Balaklava bay near Sevastopol. In the immortal Homer sung by the healing powers of hot springs near Scamander Troy. The ancient Greeks called bathing in hot spring "dip Heracles, believing that life-giving properties of water and steam given the mythological hero of beauty, strength and power. In ancient Greece, a law was passed, which required all citizens to visit regularly baths. Temples in ancient Hellas were built near sources, in a picturesque area in the mountains, near the forest with a favorable climate. They carried out the prevention and treatment of patients. Water, which is consecrated by the priests of temples, were attributed to the miraculous healing properties. Along with balneotherapy in the temples was carried out climatic and psychotherapy.

In the IV century BC, Hippocrates Kossky (460-377 BC. Er. - "Father of medicine") in his treatise: «Corpus Hippocraticus, de aera, aquis et locis» («On the air, water and places») in detail described the methods of water treatment and scientifically substantiated, the essence of its impact. When Hippocrates hydrothermotherapy flourished. He used perfusion (fresh and sea water), rubbing lips, dry air, steam, hot, warm and cold baths, general wraps and local compresses, hot poultice of linseed and sand. Hippocrates developed the indications for these procedures, techniques and methods of their realization in feverish, inflammatory, rheumatic, surgical and women's diseases. He recommended for acute conditions apply alternating hot and cold procedures, and in chronic diseases - the kind, thought that the appointment of hydrotherapy needs an individual approach to the patient, prohibits hydropathic procedures immediately after a meal, has developed some theoretical background hydrotherapy. In particular, Hippocrates wrote: "... water can make the body warm and take it away, it creates anger and reaction affect chemically and mechanically. Warm water has a calming effect on the nervous system, eliminates the tremors and seizures "(quoted in VL Tolbin, 1940).

Paid great attention to Hippocrates sweat, considering it a means to liberate the body from excess heat and toxins. He gave a number of practical guidelines for the use of fresh and mineral water, some of them did not lose their value so far. Hippocrates Kossky was not only a brilliant scientist, the founder of scientific medicine, but also an excellent athlete - a swimmer, wrestler and horseman.

In the III century AD. er. prominent role in the history of medicine has played Aristotle as the founder of scientific realism. He tried to explain the therapeutic properties of mineral waters and the cause of their mineralization. Since he believed that the properties of mineral water depend on the properties of the soil on which they take place, which was confirmed by chemical and geological studies conducted in recent times. In his view, sea salt under the influence of the sun rises from the water vapor from the sea, and then the water evaporates and the salt is deposited in fresh water and makes their minerals. Heat and gases found in mineral springs, he explained the presence of fire inside the earth, believed that the gases are attached to mineral waters healing properties.

In the I century BC. er. the famous Greek physician Asklepiad (Asklepiades, 128-56 years. BC) of Aces, suffered a Hippocratic teaching in Rome. He recommended a simple and in accordance with the nature of treatment, possibly avoiding drugs. His motto was: "to treat safely, quickly and pleasantly» («tuto, celeriter, et jucunde curare»). Favorite method of hydrotherapy Asklepiada were pouring, wiping, showers and baths. He attached great importance to cleanliness of body and a good sweat for therapeutic purposes, recommended air baths, massage, physical exercises. For example, the dropsy, he treated the gymnastic exercises, grinding and pouring warm salt water.

Wide popularity enjoyed hydrotherapy, held freedmen slaves, and later Life-physician of the emperor Augustus, Antonius Musa. With the help of hydrotherapy he cured pampered Caesar from rheumatic pains and severe hypochondria. In gratitude, the emperor erected a statue of her savior, rewarded him and gave certain medical caste many rights and benefits. Through hydrotherapy A. Muse healed the famous Roman poet Horace.

Aulus-Cornelius Tselz (Cornelius Celsus, in 1925 BC. Er. - 45 AD. Er.) Regarded water as one of the most effective medical means. He recommended that cold water in a sponge, rubdowns, baths, wetting, compresses and other hydrotherapy, such as steam baths to treat and prevent various diseases. So, he appointed a cold compress to treat gout, headaches, wound healing, bleeding, and erysipelas, cold douche used them for sunstroke, headache, melancholy, epilepsy, joint pain, hysteria. With jaundice and other diseases of the abdominal cavity Tselz appointed swimming in the sea, the consumptive patients recommended long sea journey, life on the beach, etc. The importance attached Tselz internal use of water as a drink. "Who slowly digests the food," wrote Tselz in his encyclopedic work «De medicina», - who suffers from constipation, or flatulence, should drink cold water and, if necessary, by a few glasses at a time, digestion takes place more easily, a meal washed down with a gulp of cold water. Drinking water is also useful after vomiting (with a weak stomach), and brash. "

Kai Pliny II (Gajus Plinius Secundus, 23-79 AD), who lived in the early I century AD wrote a great book, «*Historia naturalis*», which often dealt with balneotherapy and mineral waters, depending on the soil on which they occur and explain their different color, the presence of the land captured by organic and inorganic substances. Kai Pliny II said that while the extensive use of mineral waters for treatment. He first mentions the treatment of mud from the

mineral springs, and warns against taking too long, mineral baths and the absorption of too large a quantity of water inside.

In the first half of I century Athenaeum of Cilicia described in detail the mineral springs of Greece, Asia Minor and southern Italy and particularly praised the springs flowing from the foot of Mount Olympus. His pupil Agatin from Sparta first wrote about the medicinal value of sea bathing. He was an ardent supporter of cold baths and recommended in some cases replace the warm baths with cold, combining them with showers and grindings.

At the end of I century Arhigen of Apamea (Archigenes aus Apamea in Syrien) first proposed a classification of mineral waters, based on a primitive analysis of water (by smell, taste, elemental analysis has fallen out of the water sediment). This classification was certainly very far from perfect.

At the beginning of II century Herodotus - Agatina student, wrote a treatise on balneology, which described how the use of mineral waters, testimony to their destination. He developed a reception mode and dosage of mineral baths, mineral baths are appointed by increasing the length until the middle of treatment and then gradually reduced the duration of bathing to the starting time. In order to hardening he enjoyed swimming and baths of fresh water. Herodotus described the natural sand baths, sun baths, dry heat treatment, etc. He wrote: "Poultices from the hot sand are shown in patients with asthma, pneumonia, gout, progressive paralysis, the undernourished, hydropic, and in general for all who are obsessed with what a chronic disease. All of these diseases, except those for children, respond well to this treatment. The most favorable time of year is summer, and should choose the hottest days," (quoted in EM Brusilovsky, 1928). There's also the author described in detail the methodology for taking sand baths, after they carried out swimming in the sea and ends with pouring and rubbing.

In the Roman Empire was the cult of water. The water is very widely used in hygiene, preventive and therapeutic purposes, as evidenced built at that time the Roman baths - baths. The word "Terme" comes from the Sicilian village of Therma, which was built near Bath, where we used the local hot springs. The first terms were built in Rome in 24 BC. er. In 211-216 years. Mr. er. Baths of Caracalla (Rome) covered an area of 12 hectares and can accommodate 2500 people at the same time, and constructed in 505-506 years. Baths of Diocletian are the largest in the history of mankind. They are housed 3500 people, they had 2,400 marble seats, 3000 baths, swimming pools with flowing water, one of which had a size of 1,700 m². Some Roman Baths had special furnace heating (60 °C) sex, which is then sprayed with water to form steam. On this floor you can just walk in wooden sandals. In general, Roman Baths is a luxurious architectural works, they posted the best sculptors sculptors of the time, they were fitted with silver and sometimes gold taps. Patricia spent in the terms most of the time, leading the secular and business talks. In addition to water treatment in the baths were other methods of natural therapies: massage, peloido-, psammo-therapy, etc. At that time the terms were erected everywhere to invade the Roman conquerors. At the site of famous European resorts such as Vichy, Karlovy Vary, Baden-Baden, Wiesbaden, and others had previously been the ancient Roman baths.

The ancient Romans profuse sweating in a sauna was considered a sign of good health, so instead of a welcome meeting they asked: "How to sweat?". The Romans appreciated the terms as a place of treatment. Their favorite saying was: «In balneis salus» - the healing baths.

In the ancient Aztec capital of Tenochtitlan during the excavations have been discovered along with the ruins of magnificent temples, gigantic pyramids, built on stilts on the lake-rise buildings, branched water supply, aqueduct and comfortable bath.

Baths in the ancient Incas were high and spacious. They were built of mud and volcanic glass, had a dome shape and although they were pretty hot, but breathe easy. In addition, the Incas took sweatshop procedure, burrowing into the heated stack of herbs. This procedure was carried out in Russia (the Urals), rheumatic pains, colds.

In the II century, Claudius Galen (Galenus Claudius, 131-201 AD) of Pergamum was the last of the famous physicians of Greco-Roman era (the last of the Mohicans). He wrote more than 130 medical works, which represent the most comprehensive encyclopedia of all preceding him medical knowledge. From medical treatises written by him in 1983 came to us all. In his writings, Galen systematized the basic provisions of ancient medicine and established a system of medical opinion. This system for nearly a half thousand years has influenced the development of medicine. He considered medicine as a science, which leads back to Hippocrates and his followers. Galen believed that the treatment of disease should be conducted using the natural forces of the body and application of funds, causing the opposite effect of symptoms such as dryness, he recommended against humidity, high body temperature - cooling.

In the treatment of patients with Galen is widely used in mineral waters, and believed that mineral water can be prepared by artificially diluting in fresh water salt, alum, sulfur, etc. In the writings of Galen there is information about the healing powers of marine climate. Patients with lung diseases on his way to the Tyrrhenian Sea and encouraged them to breathe the sea air and the sulphurous fumes of the volcano Mount Vesuvius. Of great importance he attached to sweating as a method of prevention and treatment. In his treatise "On the preservation of health," stated that one of the causes of aging and, in particular, itching of the body in the elderly is a lack of sweating skin. To increase the sweating Galen recommended hot baths. He founded a therapeutic bath in which treated patients with various diseases. If Hippocrates was the motto of "not hurt", then Galena "nothing more".

The value of Galen in the development of medicine is enormous. Kovner wrote: "Medicine of Galen is a crown of the building of ancient medicine, the foundation is laid down by Hippocrates."

After Galen a period of decline beginning in the development of medical science, as well as general culture of the Roman Empire. Ancient culture outlived its time. There was the Great Migration, which is like a hurricane has destroyed almost everything that was created during previous eras effort of the best minds of humanity. Barbarism of

new people, replacing the ancient world was thrown into many centuries ago, advances in medical science, including hydrothermotherapy. An era of the Middle Ages, which lasted almost until the XIII century, when the ruins of the destroyed cultural revival and a new culture of medicine.

Thus, in the ancient classical world hydrothermotherapy reached a high degree of development. Doctors at that time were known to warm and cold mineral water, their origin, some physical, chemical and hydrological properties and features. Developed the first classification of mineral waters, indications and contraindications to their use. Along with this have been known and widely used hydrotherapy, sea baths, swimming, sand, mud and dry-air baths, spa baths, ie, almost the entire arsenal of modern hydrothermotherapy. Lacking only the scientific basis of all these methods of treatment and prevention.

2. The Middle Ages and the Renaissance.

During the Middle Ages hydrothermotherapy, as well as other achievements of the ancient world, was forgotten. However, at this time in Byzantium used some methods hydrothermotherapy. So, Aetius of Amida (Aetius aus Amida, 502-572), the healed in the courtyard of the Byzantine emperor, with pain in his thigh applied burning loins and sand baths, and sea treatment anemia. Itch, wounds and fractures, he recommended warm sea baths. He wrote: "heal the wounds of fishermen under the influence of sea water without suppuration, if not annoying." Trallesky Alexander (Alexander aus Tralles, 525-605 was) used for apoplexy and epilepsy, diaphoretic, and for lethargy - warm baths.

In the first half of XI century, a prominent Central Asian scholar and lexicographer (physician, philosopher, scientist and poet), Abu Ali Al-Husayn ibn Abd Allah ibn al-Hasan ibn Ali ibn Sina (the latter part of his name - Ibn Sina - was distorted in Europe "Avensina" and turned and Avicenna) attached great importance to maintaining the purity of health, exercise, nutrition, sleep and bath. Its main monumental work on medicine, "Canon of Medicine" written in 1012-1024 years, has been translated into many languages, including in Russian, and reprinted several times. Third of its publication in 10 volumes in Russian was done in 1996 in Tashkent. In this work, which became a guide for many generations of doctors author devotes entire sections of water are inside ("water quality", "learn how to protect themselves from harm traveler varying water), swimming (on bathing in cold water), baths ("about bathing in the bath and the baths"), bathing, dousing, compresses, lotions, enemas, describes in detail the methods of treatment of sand, warming and cooling of the body. In particular, he wrote: "The best water - water spring ... spring of the current ... open to the sun and wind ... that falls from high places ... water with muddy riverbed better than those that flow over the rocks. After the clay purifies water, it takes away from impurities and makes it more transparent, and the stones do not. But clay is in line to be clean." "Cold water in moderate amounts - the most suitable water for health" Such water - a means of stimulating the appetite and strengthens the stomach."

Ibn Sina developed a testimony to the external application of some mineral waters ("of copper", "iron", salt, sulfur). He writes about the benefits of receiving sulfur baths in skin diseases. "Bathing in cold water ... - The author writes, "immediately lays siege to the natural warmth in the mouth, then she rushes to the surface again, reinforced by several times." Thus, Ibn Sina described one of the main factors of the cold water, which is now scientifically justified and has practical application in water treatment. On treatment of the sand, he wrote: "Stronger than any other sand dries the moisture on the skin surface sea sand. Sometimes it sits when it is hot and sometimes it is buried, and sometimes it's a little roll in the body." Sand "dispels the pain ... and generally very dry out the body." Ibn Sina warned of the hazard using a sauna on an empty stomach or after eating, he wrote that "should be wary of out of the bath immediately, uncover, cooling body, and should come out of the bath in the winter, wrapped in clothes." He recommended taking a bath "as long as the skin continues to redden and swell, to leave as soon as the [red] begins to disappear." "Enemas - he writes - is an excellent remedy for shaking out excess of guts." In his writings you can find many descriptions of the sea in skin, nerve and stomach diseases.

In the XV century (in 1485) Mikhail Savonarola (Michael Savonarola) published a treatise on balneology (Tractatus de omnibus Italiae balneis), which described the mineral waters of Italy, the treatment of fresh and mineral baths, and baths of wine and milk. Incidentally, the Egyptian queen Cleopatra and the wife of Emperor Nero Pompey rejuvenated baths of donkey's milk.

The great Florentine Leonardo da Vinci (Leonardo da Vinci, 1452-1519) was not only a brilliant artist, an athlete (won in tournaments in fencing, horse riding, was an excellent swimmer and a gymnast), but also a distinguished scientist. Recently found his manuscript ("Atlantic code") indicates that Leonardo anticipated the creation of a bicycle, an airplane and water skiing ("method of walking on water"). He preached purity of body and mind, stood for the revival of hygiene on the model of antiquity, was involved in the construction of water mains and sewers in Milan, swimming pools, offered to provide them with mechanical ventilation.

Francois Rabelais (1494-1553), writer (author of "Gargantua and Pantagruel") and the doctor stood up for the revival of traditions of ancient times - the love of running, gymnastics, swimming, playing ball, ridiculed the scruff. French philosopher Michel de Montaigne (1533 - 1592) made his "experiments". He argued that health - a jewel - because life without it becomes unbearable and humiliating, the most prized natural methods of healing. Traveling through Europe, Montaigne visited almost all the known sources and became a staunch supporter of hydrotherapy, various water effects and baths. He wrote: "I began to resort to hydrotherapy, because I believe that the baths have curative effect, and we, I think a lot of losing what we cease to use them, as it was practiced in ancient times almost all nations ... I can not imagine that it was helpful for us when our pores are clogged and the body is formed crust." (Cited by A. Galitsky, 1986).

In the XVI century Fallopius Gabriel (Gabriele Falloppio, 1523-1562) published a lecture on issues of physical and chemical composition of natural mineral waters and their therapeutic applications. Although at the time of hydrotherapy entirely in the hands of charlatans, writes V. Winternitz (W. Winternitz), thanks to the genius of Ambroise Pare (Ambroise Pare, 1520-1590) it was introduced into surgery. A number of leading physicians of Europe (German-Hermann, father and son Gelmonf - Helmonf and others) have tried to rehabilitate water treatment as an effective method of therapy, but met resistance from several doctors.

In XVI Paracelsus (Paracelsus - Theophrastus von Hohenheim, 1493-1541) - a great reformer dilapidated medieval medicine, thanks to his practical genius helped balneology get out of the fog covering it. He pointed to the failure of Arab herbal and patterns and made spa and dietary prescriptions for the treatment of chronic diseases, syphilis, etc. His therapy of lumbago and mineral waters. His authority, he gave significant impetus to the revival hydrothermotherapy.

The first written mention of the sauna has appeared in the book the father of Finnish literature Michael Agrekoly in 1544, where the sauna is recommended as a therapeutic agent (P. Valtakari, 1978). And in 1688 at the University of the Finnish city of Turku, the defense of the first doctoral dissertation on the benefits of saunas.

In the XVII century for the benefit of cold baths noticed Berger (Joh. Gottfr. De Berger), Ridlayn (Vitus Riedlein) and Fischer (Daniel Fischer). At the end of XVII century, Guido (Guidot) introduced a cold soul of England, Robertson (Robertson) used the cold bath and immersion; Locke (Locke) as the recommended treatments drinking water, bathing and swimming. In the same century there were attempts to industrial bottling of mineral water, keeping the saturating their carbon dioxide ("ghosts") and temperature. Bacon Verulamsky pointed to the possibility of producing artificial mineral water. In 1682 Fove (Fauvet) analysis of the waters of Vichy, and in 1685, Horst (Horst) - Water Zelters, Strauss (Jon. Christ. Strauss) - Carlsbad and other Kings of France, Henry IV, Louis XIV, XV and XVI issue special orders on the Supervision of mineral waters.

In the XVIII century, hydrotherapy is gradually being revived, fueled by eminent doctors in England, Floie (Floyer), Germany - Friedrich Hoffmann and his students, father and son Gang and their followers in England - Wright and Curie, Germany - Horn, Gufeland, Austria - Hildebrand.

In 1702, Floyer wrote a book Psychrolucia, which for 30 years (until 1732) was published in London on 6 times. In it he demonstrated the harmlessness of cold water and vain fear of it, recommended cold baths, cold douche for health promotion. He organized the school, pupils who promoted his ideas.

Friedrich Hoffmann (Friedrich Hoffmann, 1660-1742) in some detail investigated the effects of cold and warm baths, and first pointed to the influence of cold on the tone of dense tissue.

Z. Gan and J. Hahn (Sigmund Hahn und Joh. Sigm. Hahn) was founded in Germany hydrotherapy in feverish conditions. Wright (Wright) water treatments to cure patients with severe fever epidemic raging on a ship en route from India to England. This prompted J. Curie (James Currie) test method for Wright during epidemics of typhus. Curie carried out experimental and thermometric studies and theoretical basis for the value of hydrotherapy. Curie has created a scientific school on hydrotherapy. In addition to febrile illness, he successfully applied hydrotherapy in paralysis, gout, cramps, tetanus and other diseases.

In the XVIII century English physician, R. Russell has found that children living on the sea coast, rarely suffering from tuberculosis of cervical lymph nodes (scrofuloderma). Based on these observations, he proposed to organize the world's first seaside resort, which opened in 1772 in Margate on the North Sea coast, where in addition to sea bathing, apply warm sea baths, general and local rubdown, compresses, showers, rinse, rinse Other hydrobalneo procedure.

In the same century father of German maritime treatment Vogel (Samuel Gottlieb, 1750-1830) from Roshtok wrote the book "The benefits of sea bathing.

In the XIX century, after a series of works of famous chemists Berzelius, Liebig and Fresenius settled and expanded use of mineral waters for medicinal purposes, has opened many new resorts.

In the XIX century, hydrotherapy have become widely used "natures doctors" - talented people who have no special medical training, but in practice, making sure that the healing properties of water and using it to treat patients. The most prominent "natures doctors" have been successfully used in water treatment purposes were peasant B. Prissnits (W. Priessnitz) in Austria and Pastor S. Kneipp (S. Kneipp) in Germany.

Vincent Prissnits long suffered from unhealed wounds of the chest, the resulting injuries and, after an inconclusive various means of treatment, was applied on the wound warm compresses and quickly recovered. After that he began to widely use water treatment and became known not only in Austria but also in several other European countries. A special medical commission set up by the Government of Austria, to test its methods of treatment and hydrotherapy legalized in medical practice. Along with compression Prissnits used for the treatment of pouring, drinking cold fresh water (up to 17 liters per day), cold showers and etc. In 1879 he created the first prototype of the cascade shower, adapting to the mountain spring wooden gutter-pipe through which cold water from a height of 10-12 m fall on the receiving patient's procedure. Here's what to write about Prissnitse personally knew him, an outstanding hydrotherapist XIX century Prof. Winternitz: "This man, an uneducated peasant, was endowed with extraordinary powers of observation on the nature and being free from any preconceived theories, has the energy, rare wit and ingenuity. He has done for treatment of a great and happy an empiricist. What he did ... can fill thousands of printed pages ... "In the Czech Republic and Slovakia and is currently being treated with cold water by the method Prissnits.

Sebastian Kneipp in his youth was seriously ill and, disappointed in all treatments, applied to himself

hydrotherapy and quickly recovered. Then he began to treat the water procedures sick people. Based on research conducted by himself and 35-year-old practice of treating patients with water C. Kneipp wrote the book "My water cure" which was published in 1886 this book became very popular among doctors and sick people. It has been translated into several languages of the world, including the Russian, was reprinted 62 times. The latest edition of its in Russian was carried out in Kiev in 1990. In this book ("My hydrotherapy. Means for curing diseases and preserving health"), the author writes that the goal of treatment - to help nature by who, becoming healthier. " He advocates a gradual, moderate, differential application of water in healthy (to prevent disease) and patients (depending on the form of the disease, its severity and the patient's age). S. Kneipp writes that: "After a cold bath should not wipe the body (except head and hands so as not to soak in the dressing gowns). On wet body quickly wear a shirt and dress the rest. " Then move until all body parts are dry and not reach its normal temperature. The author attached great importance to hardening of the body. He wrote: "The duration of health can be achieved only if the tempering himself from his early years, is the main condition for its normal and good condition." He further suggested that for hardening the following ways: walking barefoot, walking barefoot on wet grass, walking on the wet stones, especially useful walking barefoot on the new-fallen fresh snow, walking in cold water. For hardening mainly the extremities: hands and feet immersed in cold water and pouring his knees.

The book described in detail the means used by the author Hydrotherapy: compresses, baths (foot, half bath, sitting and full of trash hay, oat straw, mixed, mineral. For body parts, steam), perfusion (full and partial), bathing (full and parts of the body), wrap (partial, total, wet shirt, a Spanish cloak), drinking water. The second part of the book (Home pharmacy) is devoted to extracts, tinctures, powders and oils, prepared from vegetable matter, described the plants from which they are prepared, for advice about how to apply them and indications for their reception. Finally, the third part of the detailed treatment of individual diseases, the author of the proposed facilities. This book has not lost its relevance in the present. In 1980 in Berlin published volume guide "Therapy for Kneipp. Now the resorts in Germany and Austria treat patients Kneipp methods.

In the XX century began to revive and spread in all civilized countries of the sauna, which is the cultural heritage of the Finnish people. First in its distribution was the construction of a sauna in Paris for the Olympic Games in 1924, an important role in advertising saunas played the Olympic Games in Berlin in 1936, where the Finnish athletes was built sauna, which were then attributed to the significant achievements of the Finnish athletes at the Olympic Games (VR Ott, 1948).

Particularly widespread saunas received after the Second World War. For example, in 1946-1947. were built saunas throughout the Czech Republic and Slovakia in 1966 - in Czechoslovakia was established sauna center, in 1968 in the core I was the Czechoslovak conference on the sauna. In 1974 was formed saunologic Commission for the Slovak and, in 1976 - when the Czech physiotherapy societies.

In 1982 in Piestany passed the VIII International Congress saunologic at which two representatives of Czechoslovakia were elected members of the International Society saunologic (cited by M. Mityay, 1984).

Indian tribes of Central America used the twin tub Temescal (the Aztec theme - a bath, Callie - a house, FM Cresson, 1938) Ancient Maya not only for hygiene but also for therapeutic purposes, for rheumatic, skin and other diseases (O. Lewis, 1953; K. Tyrakowski, 1977). Currently Temescal recommended by doctors, and used extracts from plants and other ingredients that are evaporating, has a therapeutic effect (H. Krumbach, 1977).

In 1852, L. Fleury (L. Fleury) first used jet souls in France and in detail described it in his book «Traitepratique et raisonne d'hydrotro-therapie». While the shower was used the low temperature and Fleury attached particular importance to the mechanical factor in its effect. He used the shower in the form of a broken jet (douche brisee), ie, one which is now referred to as fan-like shower, and bringing pressure to 4 atm. Therefore, the harp can be called a shower shower Fleury. Extremely great contribution in the dissemination of Flury rational hydrotherapy in France. He studied mechanical and thermal effect of hydrotherapy and simplify their technique. Due to their theoretical studies and practical success, he became the founder of modern hydrotherapy in France. The results obtained by them in the hydrotherapy intermittent fever, chlorosis, contractures, chronic congestion, congestive conditions of various parenchymal organs, drew the attention of medical hydrotherapy world far beyond France jet souls in the form of a compact jet, preferably low temperature and high pressure (up to 4 at .) used the famous French clinician Jean Charcot (Jean-Martin Charcot, 1824-1893), in 1867, he described its use in the treatment of chronic diseases («Lemons sur les maladies des vienillards et maladies chronique», Paris, 1867), in connection with what is called jet shower shower Charcot. Since 1864, the main questions of theoretical and practical hydrotherapy began to study on a scientific basis, Professor, University of Vienna Wilhelm Winternitz (Wilhelm Winternitz, 1835-1917), who made a great contribution to the development of rational hydrotherapy and its physiologic rationale. His numerous works have been translated into foreign languages (including part - in Russian). In 1890 came out in German second amended and revised edition of this book, which in 1893 was also translated into Russian. In his writings, V. Winternitz stated that "hydrotherapy should be based on natural-scientific basis, the cornerstone of its physiology and should serve as a methodological observation." Along with the external use of water procedures he used for therapeutic purposes its internal use. For internal use Winternitz gave "preference mountain spring water to the common well-water" and demanded to adhere to strict sanitary rules for its use.

In 1899, in Vienna, established the first Department of hydrotherapy, which was headed in. Winternitz. Then the same department was organized at Berlin University. Hydrotherapy is widely used in clinics Erb, Firordt, Shtryumpel, Notnagel and Leiden. In 1896, in Leipzig issued a 5-volume work M. Platen (M. Platen) «New method

treatment. Guide for life in accordance with the laws of nature for health and for treatment without the aid of drugs, "in which too much space was devoted to water and thermotherapy. In 1901, these books have been translated into Russian and reprinted many times. In them you will find: "Mankind because withers and ill, because falls within the influence of hundreds of diseases, it is almost completely recoiled from the natural lifestyle and lives completely against the laws of nature." In the years 1916-1924. German scientists Dietrich (C. Dietrich) and Kaminer (S. Kaminer), and the French scientists Pierre (M. Pierie) and Milo (M. Milhaud) published a multi-volume work on balneology (in particular, the radioactive mineral waters). In 1931 the Italian scientist Messina (M. Messina) wrote a treatise on hydroclimatology.

Prior to 1916, dominated the physics theory of van der Waals forces, according to which the water is like a gas has its own structure. In 1916, Virgin et al. using x-ray structural analysis studies of water, came to the conclusion that water has a structure similar to that of solids. This discovery was laid a new concept about the structure of liquid and, above all, water. Began a detailed study of the structure of water and its anomalous properties (Breg et al., 1920, V. Keez and J. de Smedt, 1922, etc.), which continues today. The first theory about the structure of water was developed by J. Bernal and R. Fowler in 1933, according to this theory, the structure of water determined by the structure of individual molecules. The water molecule has a tetrahedral structure "of corner" design, and the two hydrogen atoms are shifted to one side of the oxygen atom. In 1931, Harold Yuri opened the heavy hydrogen, deuterium, with an atomic mass of two times their mass, and next in 1932 Yuri G. and E. F. Osborn found in natural water heavy water.

In the XX century in several countries have established research institutes, scientific and medical societies and publishes journals, conducts international congresses, conferences, symposia on balneology, physiotherapy. For example, in France from 1886. published magazine «Presse thermale et climatiques», in Italy in 1948 - «Clinica termale» and others, in Germany - «Zeitschrift für Physiotherapie», in Poland since 1951 «Balneologia Polska», in Romania - «Balneologia» in the Czech Republic in 1923 published the magazine «Fiziatricky a Reumatologicky vestnik», etc.

In 1914, in Paris on the initiative of spa Society established the National Institute of Hydrology and balneology. Then, these institutions were founded in Badgastein in Baden (Austria), Rome, Milan (Italy) and elsewhere. In 1951 he published a book by M. Messina, "A Treatise on the clinical hydroclimatology, and in 1957 a review" Mineral water world. " In 1960 he published a book by Herbert Krauss "Hydrotherapy» (Herbert Krauss - Hydrotherapia, Berlin, 1960). Hold international congresses and symposia on balneotherapy and thermotherapy. So, in 1983 in Vichy (France) hosted an international symposium on thermal medicine, which, along with foreign authors, were presented and approved the reports of our local scholars. In 1989, in Freiburg, an International Congress on Physical medicine, balneology and bioclimatology, attended by over 500 specialists from 18 countries in Europe and Asia, including the Soviet Union. In the same year in the resort of Bad Krozingen (Germany) held a symposium on balneotherapy, etc.

In 1921 in London, was created by the International Society of Medical Hydrology, which included scientific societies of scientists from over 40 countries, in 1928 they were joined by scientists of the Soviet Union. In 1937 was organized by the International Federation of the health resort, which in 1947, renamed the "International Federation of Hydrotherapy and Climatology (FITEC). In 1999, Congress in Yalta, it was called "The World Federation of Hydrotherapy and Climatotherapy (FEMTEC). FEMTEC is the most representative association of Spa and health organizations in the world. FEMTEC composed of national Spa and health resorts associations and federations, as well as central state organizations dealing with Spa problems from many countries and continents. FEMTEC functions under the aegis of the World Health Organization and submits every three years report on its activities. The principal functions of the Federation are following: representing world thermalism matters and promote them internationally before states and public organization; international business-like co-operation in health resorts' sector; study, research and experience exchanges in the sphere of Spa treatments; popularization of Spa and health resorts of the FEMTEC member-countries in different countries of the world. With a view of organizing fruitful activities of FEMTEC there function 4 permanent commissions: medical, economic, technical and social. FEMTEC members actively participate in international scientific symposia, exhibitions, conferences; there are held annual General Assembly, Executive Board and Executive Committee meetings. Every year FEMTEC organizes Scientific Congress along with a competition of scientific works, marks of the best thermalists etc. The Federation maintains close contacts with European Spas Association (ESPA), World Tourism Organization (WTO) and other international organizations. The Board of FEMTEC includes the following member: Prof. Nikolay Storozhenko - (Russia) President of FEMTEC from 1998, President National Spa Association D.M., Honored Physician (<http://www.naturmed.unimi.it/femtec.html>). In 1996 he joined the Federation of Russia, which was timed to the International Congress "The resort medicine, science and practice", held in May 1996 in St. Petersburg. In 1998 the Federation adopted the Ukrainian Association of Physiotherapists and health resort. One of the main problems is FEMTEC: cooperation of scientific institutions, exchange of information in the study of technological and scientific problems associated with water-and climate-through scientific committees, convening the annual congresses, conferences, symposia, seminars, publications, etc.

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