

CURRENT SITUATION THERAPEUTIC MUD OF TAJIKISTAN

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Abstract: The article seeks to examine the characteristics of Lake Oxukon therapeutic mud in terms of size and thickness of the deposit. In the course of reviewing the article, the author researched an important element of therapeutic mud, its liquid phase, mud solution or its extraction, and made his conclusions substantiated by quoting material from various sources.

Key words: mud solution, deposit, salt, peloid, treatment, colloid, substances, peat

СОВРЕМЕННОЕ СОСТОЯНИЕ ИСТОЧНИКОВ ЦЕЛЕБНЫХ ГРЯЗЕЙ ТАДЖИКИСТАНА

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Аннотация. В статье предпринята попытка изучить характеристики лечебной грязи озера Оксикон с точки зрения размера и толщины залежи. В ходе рецензирования статьи автор исследовал важный элемент лечебной грязи, ее жидкую фазу, грязевой раствор или его экстракцию, и сделал свои выводы, обоснованные цитированием материалов из различных источников.

Ключевые слова: грязевой раствор, месторождение, соль, пелоид, обработка, коллоид, вещества, торф

Among the many wonderful natural healing factors that Tajikistan has at its disposal, there are various springs with medicinal mud available on its territory. And there are more than 10 of them on the territory of Tajikistan. Lake Oxukon is the largest in terms of size and thickness of deposits of medicinal silt mud. All mud-healing lakes are located mainly in the interior of the mainland in sandy, saline, waterless, far from settlements in harsh climatic areas. Therefore, the therapeutic mud of these lakes is of silt origin, with a high content of various salts and other microelements.

The imported silt mud of the Oksukon and Tanapchi lakes is widely used. In some medical institutions and sanatoriums of Tajikistan, these muds are used with great success, but they have not been comprehensively studied. Many important issues related to the delivery, storage of mud, and treatment methods remained unclear. The author of this article, working in the field of balneology, in particular, mud therapy, in the conditions of a polyclinic and a hospital, simultaneously carried out scientific research work.

As a result of many years of experimental and clinical work, he was able to study some aspects of the physicochemical and microbiological properties of the silt mud of these lakes, as well as mud management in a resort, sanatorium, and also

outside the resort environment. Under experimental conditions (on laboratory animals, pathogens, as well as on seeds of agricultural crops), some aspects of the bactericidal and stimulating properties of the silt mud of the Oxukon and Tanapchi lakes were studied.

A technique has been developed for effective mud therapy in a number of patients with lesions of the support and movement organs, peripheral nervous system, gastrointestinal tract, diseases of female pathology, urinary organs, pustular skin diseases, etc. In recent years, mud therapy for purulent ear diseases has been carried out with great success. throat, maxillary cavities of the jaw, with a number of dental diseases, in particular, three chronic, difficult-to-treat gum disease - periodontal disease. Silt mud of lakes Oxukon and Tanapchi is in appearance a greasy homogeneous black, in places, in deep layers, gray, shiny mass without noticeable granularity, rather sticky and plastic, bitter-salty in taste, with a weak smell of hydrogen sulfide, with a specific gravity of 1,70 to 1.87.

In mud therapy practice, the degree of mud clogging is important, which is determined by the percentage of various mechanical impurities: sand, salt crystals, gypsum, pebbles, etc. Compared with Tanapchi silt mud, in Oksukon mud there is a place of greater clogging with mechanical impurities.

Solid particles, which are called in the literature the skeleton or crystal skeleton of mud, should not exceed 0.25 mm in size, and their total amount should not exceed 10 percent of the weight of wet mud. It is this composition that determines the quality of the therapeutic mud. The fewer large particles and the more small ones, the higher the healing properties of the mud. In the silt mud of these lakes, fine particles predominate, therefore our mud springs are among the best categories.

The next important place in the therapeutic silt mud is given to the presence of crushed particles in it with a diameter of tenths of a micron of colloidal substances. The main place in it is occupied by iron sulfide. Thanks to this colloid, the therapeutic mud has a black color, when applied to the skin, it easily adheres to the body and is rather difficult to wash off, heated to 40-41 °. Healing mud is easily tolerated by patients, retains heat and slowly releases it to the body. On the contrary, while in the bathroom up to 38-40 degrees a person can with great difficulty endure this temperature. An essential element of therapeutic mud is its liquid phase, mud solution or mud extraction. In the sticky part of the healing mud, there are also important trace elements, such as saturated with salts of potassium, calcium, magnesium, bromine, sodium and other chemicals.

Healing mud is not a dead and lifeless mass. It is inhabited by many different microorganisms. As a result of the vital activity of these microorganisms, therapeutic mud is constantly enriched with new products. As a result, chemical changes and movements occur, due to which the most complex compounds are formed.

A number of Russian and foreign researchers (KS Lesnoy, AN Egorov, KG Kivatov, Vogt and others) have found hormonal substances such as folliculin and prolan in various saline and peat muds. Thus, scientists have found that hormone-like substances in therapeutic mud are produced by plants and microorganisms. The work of this huge chemical underwater laboratory does not stop for a minute, unless, of course, the natural conditions necessary for the normal process of mud formation are

violated. Sanatoriums and medical institutions that are engaged in mud therapy and related mud management should take into account the creation of appropriate conditions for the delivery, storage of imported therapeutic mud in bunkers for normal regeneration, on which the success of the treatment of patients depends.

References:

1. Healing Project. Vahob Madurmarov. Irfon Publishing House, Dushanbe, 1974
2. Lakes of Tajikistan. Hussein Abrorov
3. Website <https://ru.wikipedia.org>
4. Book: Dirt and water procedures, Arsenin SV
5. Geography of Tajikistan. 8th grade textbook
6. Nature and natural resources of Tajikistan. 10th grade textbook
7. Орлов Н.А., Ровенская О.П. Главные проблемы экологии и пути их решения // Прикладные вопросы точных наук: Материалы III Международной научно-практической конференции студентов, аспирантов, преподавателей.- Армавир: РИО АГПУ, 2019. – 179-181.