

Study of Healing-cosmetic Properties of Kroli Mud yet unknown for Medical Circles around the world

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Introduction:

In the modern world, healing mud (peloids) are recognized as the best cosmetics and in some cases curative means. Georgia is distinguished by the abundance of medicinal mud mines. Healing mud belong to exhausted, unrestorable resources.

The mud procedure affects human organism through nerve endings, receptors, chemical, thermal, mechanical and electrical irritation in the skin. The mechanism of chemical influence is as following: during the procedure substances of the mud as well as biologically active substances are absorbed by the skin, which has healing effect on the organism. Many diseases are treated with peloidotherapy: bone marrow system, nervous system, gynecological, urological, skin, vascular and other diseases.

Goal:

The purpose of our work is to popularize peloidotherapy as a treatment method and study less known medicinal properties of the mud. For this purpose we have chosen less famous mud of pseudo-volcanic origin in village Kroli, Kharagauli region. Systematic research of Kroli mud has not yet been done, which hinders its wide usage as an effective treatment and one of the most important materials for making perfume-cosmetic products.

Materials and methods:

We had several workshops with the population of the village Kroli, took samples of mud and found out the existence of different ions (Fe^{3+} , Ca^{2+} , Mg^{2+} , Al^{3+} , K^+ , SO_4^{2-} , Cl^-) and their quantitative composition.

Together with laboratory researches, we had a questionnaire and surveyed 100 people of different ages and gender living in Kharagauli region. The purpose of the survey was to estimate the frequency and efficacy of using mud as cosmetic (face mask, hair wash, hair root reinforcement) and medicinal means (as compresses).

Results and generalization:

As a result of the survey, we have identified that Kroli mud is used for different purposes:

1) 60% of interviewed women and 65% of men use mud as a hair wash remedy to replace shampoo.

2) 75% of interviewed 25 -70 year old women use mud as skincare face masks.

3) 80% of men and women who are 45 years and even older use mud for joint pain as a local application.

We have been interested in basic composition and medicinal properties of well-known balneological resorts of Akhtala and Pkhoveli muds. We have compared Kroli, Akhtala and Pkhoveli muds according to our laboratory experiments. It was found out that Kroli mud resembles Akhtala and Pkhoveli muds with its properties. Biologically active elements of the mud are similar, which causes the similarity of therapeutic effect of mud. We suppose that the intensity of influence of these muds on the human body (while treating various diseases) will be similar too, which requires special research on Kroli mine.

Conclusion:

The similarity of Kroli mud healing effect to natural healing muds is revealed. The existence of different ions in Kroli mud and the research conducted for their quantitative determination is the base for further scientific work, which will be connected with the explanation of mud effect mechanism and evaluation of the prospect of their application. We hope that the initiative proposed by us will further develop, increase and add new features to the development of spa-therapeutic and medical tourism in our country.

References:

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