



“An analytical study on the MUD as a tool in yoga and naturopathy a Natural and healthy treatments of the skin problems and joints points of the human body”

By:

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Abstract:

[Earth is one among Panch Mahabhootas having an enormous impact on human body. Black mud having immense impact on the body in health as well as in sickness. It can be procured easily and preparation of mud pack is also easy methods, it is a simple, cost effective and used as a medicine. Its black colour absorbs all the colours of the sun and conveys them to the body, so it gives good results in skin, Gastro Intestinal, body heat etc. diseases. This study has been undertaken to investigate the importance, usage and effect of mud and its practicality in the contemporary eras.]

Key Words:

[Mud, Panch Mahabhootas, Pits, Moors. Cost effective, Contemporary eras, immense impact, diseases,]

Introduction: Earth being one of the Pancha Mahabhootas is part of human body. The functional structure of the body, when exposed to mud will help to maintain harmony by automaticity. Mud that imparts its qualities to the body is used externally as baths and packs. Solid and heavy organs in the body are related to the element earth. The depletion of the earth qualities in the body is cause of disease and its supplementation is the treatment in mud therapy.

01, 02 Black mud having immense impact on the body in health as well as in sickness as its black colour absorbs all the colours of the sun and conveys them to the body. It retains moistures for a long time and its shape and consistency can be changed easily by adding water.

02 It increases the blood circulation and energize the various skin tissues and also it is cheap and easily evadable.

03 For treatment purpose preference should be given to black cotton soil with greasiness and free from pollution and contamination. Before the usage, mud should be dried, powdered and sieved to separate from stone, grass particles and other impurities.

04 Synonyms of Mud: Peloid, Fango, Baleno are technical term of mud and using thermal mud for medicinal purposes is known as Pelotherapy, Belanotherapy and Fangotherapy. Composition and Maturation In general, mud is made of water and earth containing approximately one third solids and two third water. Mud usually without significant concentration of therapeutic substances or it may naturally contain a variety of minerals like sulphur, decomposed vegetable matter including fungi, Micro flora and algae, mineral and medicinal elements. Prolonged contact between the earth minerals and water (a process known as maturation) can produce a variety of chemical reaction within the mud itself then contribute to its therapeutic properties. The chemical composition of the mud varies from place to place depending on the mineral water present in that place. Bacterial activity in the presence of specific flora, gives rise to a unique chemical composition with excellent therapeutic properties.

Chemical content of Mud:

The mud consists of micronutrients and macronutrients. The chemical composition of mud is complex, rich in Ca^{2+} , Zn^{2+} , Mg^{2+} , Na^{+} and other mineral elements, also contains organic matter such as humic acid, fulvic acid and acetic acid, which can further be classified-

1. The Macronutrients: Sulphur, Phosphorus, Potassium, Carbon
2. The Micronutrients: Zinc, Iron, Copper, Manganese Other constituents like Copper, Carbon, Phosphorus, Potassium, Iron, and Manganese are heavy metals and cannot be absorbed by the skin. PH of mud should be near to that of the blood for maximum absorption.

Types of Mud :

There are several main sources of therapeutic peloids. They include.

- Peats: Composed primarily of vegetable residue from peat bogs or peat from bottom of certain lakes.



Pic- Peat

Peat is the surface organic layer of a soil that consists of partially decomposed organic matter, derived mostly from plant material, which has accumulated under conditions of waterlogging, oxygen deficiency, high acidity and nutrient deficiency.

In **temperate, boreal and sub-arctic** regions, where low temperatures (below freezing for long periods during the winter) reduce the rate of decomposition, peat is formed mainly from bryophytes (mostly sphagnum mosses), herbs, shrubs and small trees.

In the **lowland humid tropics**, peat is derived mostly from rain forest trees (leaves, branches, trunks and roots) under near constant annual high temperatures.

In **other geographical regions** peat can be formed from other species of plants that are able to grow in water-saturated conditions. For example, in New Zealand peat is formed from members of the *Restionaceae* while in tropical coastal fringes peat is formed in mangrove. New types of peat may still be found.

- **Moors:** Composed of minute amounts of inorganic substances as well as sulphur, Iron and sulphates.

- **Bog earths:** Made up primarily of soil

- **Clay:** It helps tighten pores, tone skin and preserve its natural balance. Types of clay are Blue clay (Most absorbing), Green clay (Most widely used), Yellow clay, Red clay, Pink clay (Ideal for cosmetics), White clay (Least absorbing) .

Selection of Mud: The mud samples having good absorbing ability are selected.

Collection of MUD: Collected from non-contaminated land, Upper 3 feet deep mud should be left out and collected.

Storing of Mud: It should be stored in dark place; because initially it is darkness is better to preserve its qualities and it will grow no older in dark container.

Processing of Mud: Mud collected from non-contaminated area is separated from roots, leaves, stones etc. Then it is dried under sun for 8 hours and later soaked in the water for 1-2 days. During soaking it is mixed properly with hand and superficial contaminated water is to be removed and fresh water is added. If large amount of mud is needed then, water of 2-3 feet has to be at the surface level after mixing with it. Then later this water is drained and the mud which is saturated with water is used for therapy.

Mud Powder: Processed wet mud is again dried in sun light for 1-2 days. After drying it is triturated in Khalva Yantra (Pulverizer) and prepare the minute powder by sieving through a cloth and store in an air tight container.

Mud Temperature: Mud may be used cold, tepid or hot depending on the specific problem. Conditions like fever, warm organ cold mud is applied. Few minutes after application, it should feel tepid, suppose cold sensation persists continuously then, stop the treatment.

Mode of Application: Mud is applied on the body in 2 ways. Direct • External application • Internal application and Indirect • By covering a cloth • By poultice.

Direct External application [Mud Bath]: Mud is applied on the larger scale on the entire body. Method: Smooth mud paste is applied by spreading on the body part either in sitting or lying down position. Patient is made to expose himself to sunlight till the mud gets dried. Care should be taken to avoid catching of cold during the bath. Later ask the patient to wash the pack with cold water jet spray and if the patient feels chill, warm water is used. Then the patient is dried quickly and transferred to a warm bed. Once used mud is not be reused. Ideally a mud baths should be taken on an empty stomach, 3 to 4 hours after last meal. Some balneologists suggest that a mud bath should not be taken within 3 hours after meal for 30 minutes to 1 hour. One should conclude the mud bath immediately if any discomfort is felt such as chest pain or difficulty in breathing.

Direct internal application: Applied vaginally or rectally to treat gynaecological or urological disorders, respectively. Applied for 15-30 min weekly 3-6 times over an average of 4 weeks. Mechanism of Mud application 05 Mud is used for prevention, maintenance and cure of the diseases. This is achieved by Thermal, Mechanical, Chemical and Electrical effect of mud over the skin.

Thermal Effect: It is nothing but the temperature sensation carried by receptors, i.e. thermo receptors. Cold pack is applied to release the heat of the body in hot days and is very wonderful to healthy persons too.

Mechanical Effect: Is by the bulk of the mud which is carried through tactile receptors especially free nerve endings. When applied on affected part because of its viscosity, it soothes the inflamed or painful part. This is kept for 30 minutes and the relief is obtained because of its pressure, and pressure calms down the agony.

Chemical Effect: Is by chemicals of mud which acts as irritants over the surface and sensation is sent through pain sense i.e. chemical pain receptors. Mud is a great purifier; our utensils are cleaned by mud. When mud is directly applied or in packs it tries to draw away the toxins from the system by increasing circulation in the affected part where it is applied. As skin is semipermeable to zinc, zinc present in the form of zinc oxide is easily absorbed. It has got antifungal activity also.

Electrical Effect: It is supposed that earth has got its electricity which is always active when mud pack or direct mud is applied on the body, its electricity makes the part moving and this movement or shaking enables the affected part to be active and this activity increases the circulation in this part. The circulation removes the dirt or debris. Whether this electrical property is correct or not, may be a subject of arguments but the fact is that it provides relief and there are no side effects.

Effects of Mud

- 1. General effects:** • Increased pulse rate • Increased body temperature • Increased sweating, enzymatic activation, cutaneous vaso-dilatation • Decreased concentration of oxyhemoglobin • Decreased blood levels of creatinine, triglycerides, hydrocortisone, and alkaline phosphatase
- 2. Local effects:** • Positive influence on articular reactivity • Improved vascularization and stimulus of metabolic exchange in cartilage • Stimulus of bone cell activity in the joints • Favorable effect on circulation, cell trophic • Muscle-relaxing and soothing effect on muscular and tendon tissue
- 3. Therapeutic effects** • Mud invigorates the circulatory system by diverting a large amount of blood to the periphery and hence useful in cleansing and strengthening the skin tissue
4. • Frequent application of mud helps in improving the complexion of the skin by getting rid of spots and patches, which appear in various skin disorders and after chicken pox and small pox.
5. • Mud bath is generally recommended for all skin diseases, including psoriasis, leukoderma, Leprosy, Urticaria and other allergic conditions of the skin.
6. • Mud applications are a part of natural beauty treatment.
7. • In the organisms this causes an increase in the quantity of circulating blood (and therefore a major exchange of nutritive substances brought by the blood comes in the cells) this brings an accelerated and increased elimination of toxic substances which are produced by the diseased tissues, from the skin and from the articulations.
8. • Plentiful sweating opens the pores and allows the elimination of the toxins accumulated in the body, helps in the absorption of the beneficial substances that are contained in the mud and also removes all kinds of bad smell.
9. • It is used to remove any beauty problems caused by excess fat, the loss of tone and elasticity of the skin and from signs of tiredness.
10. • When applied to abdomen it relieves all forms of indigestion. It is effective in decreasing intestinal heat and stimulates peristalsis.
11. • Thick mud applied to head in congestive headache relieves the pain immediately.
12. • Mud applied on face, reduces the irritation of the eyes hence useful in cases of conjunctivitis, hemorrhage in the eyeball, itching of the eyes, allergic conditions etc. It is also useful in cases of errors of refraction like short sight and long sight and is especially useful in Glaucoma where it helps to reduce eyeball tension. It also provides relaxation to the eyes.
13. • Due to its anti- inflammatory, pain-relieving and revitalizing actions, it relaxes the muscles, increases resistance to the pathogen agent. Thermal mud is said to prevent or cure chronic inflammatory problems and rheumatic illnesses that are more frequent amongst older people.

14. • Its efficacy is strengthened by its ability to give off heat and this consequently leads to abundant perspiration. Conclusion: Earth being one of the Pancha Mahabhootas it is a part of human body. Black mud is very chief, it absorbs all the colours of the sun and conveys them to the body. Its four thermal, mechanical, chemical and electrical effects, help in preventive, promotive and treatment in many diseases. As mud is scientific and evidence-based research are need of the day.

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He has been awarded as 4th position holder in the world yoga championship held in the year 2012 in Bangalore (Karnataka) . And conferred with many awards. Recently Dr. Yogi, got published a dozen of research article of MUD Therapy in UGC approved care listed Research Journals.

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