
Advances in Pelotherapy

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Abstract

Mud therapy based on mud or natural peloid (maturated and applied at or near the natural site of occurrence) is progressively losing applied interest in favour of peloid therapy based on artificial peloids or peloids s.s (stricto sensu) manipulated, maturated and used inside spas, due to the following facts:

- 1. The access to natural peloids is becoming more and more difficult due to environmental restrictions (the deposits are, as a rule, located inside environmental protected areas);
- 2. The geologic sites where natural peloids occur are open systems highly vulnerable to anthropogenic contamination, particularly of pathogen microorganisms, making unfeasible the control of their sanitary safety;
- 3. The use of natural peloids could be hazardous, has happens with mud deposited by acidic volcanic waters which are characterized by very acid pH (2-3) and usually bear high contents of heavy metals;
- 4. The complexity of natural peloids composition and characteristics makes difficult not only the identification of the healing active principles, but also the understanding of the healing mechanism of action and process, and the control of both composition and sanitary state too.

The four aforesaid facts justify the increasingly interest for peloid therapy based on manipulated peloids, particularly of those called designed and engineered peloids that can be produced, either inside specialized manufacture units, or inside the facilities of spa Resorts. Designed and engineered peloids easily can be manufactured using, for instance, specific mixtures of one commercial clay (e.g., kaolin or bentonite), preferably of pharmaceutical grade, with one specific mineral water (e.g., sea water and salt lake water) or natural mineral water (e.g., spring thermal water) that after undergoing manipulation and maturation could be beneficiated (for instance through the incorporation of healing functionally active additives, either natural or synthetic, characterized by analgesic, anti-inflammatory, anti-oxidation, anti-cellulite, anti-psoriasis, anti-acne,...properties).

Keywords: Mud therapy, Peloid therapy, Chemical and microbiological constraints, Designed and engineered peloids

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