

## MORGELLONS DISEASE

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**Abstract.** *This article discusses Morgellons (Morgellons disease, unexplained dermatopathy) which is bad studied, and the article considers Morgellons history, possible Etiology and data pertaining of research and clinical picture. Also it shows own observations.*

**Keywords:** *Morgellons, fibers, «delusional infestation»*

Morgellons disease or Morgellons syndrome or unexplained dermatopathy is a name given to a condition in 2002 by Mary Leitaó in which sufferers have the delusional belief that they are infested with disease-causing agents described as things like insects, parasites, hairs or fibers, but in reality no such things are present. Most experts, including dermatologists and psychiatrists believe that Morgellons symptoms of known diseases is a Delusional parasitosis.

### **History**

According to Mary Leitaó, her then two-year-old son developed sores under his lip and began to complain of "bugs". She chose the name Morgellons disease (with a hard g) from a description of an illness in the monograph *A Letter to a Friend* by Sir Thomas Browne, in 1690. The Morgellons Research Foundation of Mary Leitaó made the exploration of a new infectious disease from Congress and the Government of the United States. Then the scientists concluded that such diseases or infectious lesion does not exist and the reason is a mental disorder. No evidence was found or other evidence of infectious, parasitic or any other process.

### **Etiology and epidemiology.**

The etiology of the disease is unknown. In the literature different authors claim parasitic disease (acariasis, èntomoz or worms), infectious (bacteriosis, possibly with transmissible through contamination), toxic or organic-the neurotic origin. A popular

version is a version of Parasitosis Psychogenic. It is also the most probable. It often finds its "victims" among the mentally ill or even just psychiatric patients.

However, patients continued to complain and their number was increasing. There were suggestions that the disease could be linked to the Morgellons genetically modified organisms (GMOs), modified by using *Agrobacterium* microorganisms. In addition, Lyme disease was considered, immune deficiency or Ecotoxicology (because of chemtrails).

*Agrobacterium tumefaciens* (Soil bacteria) can transform plant cells using a special plasmid. If you have seen growths on the trunk of the tree, so you saw crown-gall disease (tumors) caused by *Agrobacterium*. Therefore, these bacteria are often used in genetic engineering to modify products and GMOS.

According to researchers at the State University of New York, *Agrobacterium* is a universal machine for migrating genes and creating alien proteins. Therefore, they can also change and human DNA. Thus, potentially *Agrobacterium* can implement a horizontal transfer of DNA that can be considered as one of the probable causes of Morgellons disease.

Finally, in January 2012 a new independent study clarifies some details. According to the publication in the journal of clinical and experimental Dermatology, Morgellons disease, in fact, is a real disease.

Based on extensive research, including micro-immuno fluorescence of skin, hair, tissue and other material from patients, researchers reported several interesting facts.

- Patients with Morgellons disease have abnormal functioning of follicular keratinocytes. Genetic errors of cells of hair follicles and skin in DNA were fixed.

- Fibre markets have unique floral arrangement and contain keratin (a structural protein of the skin), which means that the fibers were created by a human body. Thanks to immunohistological antibody, staining it became clear that the patient's threads are keratinocytes.

- Changes in keratinocytes (of skin) most likely caused by *Spirochaetes* - Lyme disease (Lyme borreliosis).

According to scientists, the fibers are clearly biological. They are not implanted in the skin. Perhaps, their origins because of cross-contamination of DNA of GMOS. This new study clarifies a recognition of the problem of Morgellons disease and may contribute to new studies of this disease.

Some scientists believe that Morgellons is a symptom which is a long known like diseases such as skin disorders including allergic dermatitis, allergic contact dermatitis, contact dermatitis, idiopathic urticaria and infestation with the parasite scabies.

The head of the research programme the Morgellons Research Foundation Professor Randy Wymore (site of the Morgellons Research Foundation: [morgellons.org](http://morgellons.org))

The first results of Wymore refuted a version about hallucinations. "General practitioners, dermatologists, and the results of laboratory studies have shown that these strands are textile fibers. However, "it's not true", said Wymore.



Morgellons skin disease photo taken from  
<http://www.medem.kiev.ua/page.php?pid=1941>)

Wymore thinks this is neither textile fibers, nor worms, insects, fragments of human skin or hair. He says that these strands do not appear from the outside. In his view, this substance materialized within the body and possibly because of some kind of infection.



Morgellons strands visible by microscope (photo taken from <http://www.medem.kiev.ua/page.php?pid=1941>)

He also says that skin problems are not the worst symptoms. The neurotoxin or microorganism can affect muscles and memory.

Epidemiological data on Morgellons diseases is very incomplete and Morgellons Disease Research Foundation register includes over 12000 victims around the world.

### **The clinical finding**

The main social registered people with the infection were nannies, nurses, and teachers with a threefold advantage in the number of first versus of infection in a teaching environment.

Patients experience:

- Uncontrolled muscle cramp,
- Presence of non-healing sores on the skin and small dark threads which are going out from wounds on the skin
- Sores on the skin accompanied by burning and itching
- feeling a crawling
- Joint pain
- An exhausting fatigue
- Changes in consciousness,
- Memory loss,
- Mood disorders
- Serious neurological manifestations.

Patients think that creeps or crawls or insect are inside them. Such things because of hallucination. Sometimes patients even demonstrate the "parasites" or "fibers" extracted under the skin, which in actual fact are hairs or exfoliated epidermis. In the research process which was in Northern California in 2006-2008, has revealed that skin clinical manifestations are vary widely: papules, patches and the macula. But none of the patient were not detected vesicles, bull or scabies.

In literature some authors suggest a version of psychogenic parasitic disease. In 2012, the CDC (United States) published results of a study without infectious or environmental causes of disease. Laboratory tests of participants of the study did not reveal anything but reveal strands of cotton and other materials that can be in clothes.

The researchers could not explain the feelings of participants. They suggested that it might be a "delusional disorders", when people mistakenly believe that their bodies are being invaded by small organisms. In Psychiatry this disease is diagnosed as Ekbom syndrome, which was described by German doctor T.Wittmaak, and then by the Swedish neurologist K.A.Ekbom (1907-1977).

**Treatment and prognosis are unknown.**

Because doctors and scientists do not know for sure whether this is an independent disease, and if it is, what causes this disease? It used different empirical methods of treatment (for example, antibiotics, de-worming, antifungal medication, psychoactive drugs to treat mental problems, etc.)

Here is our observation.

A sick A. is about 45 years old, married. Has 2 adult sons. They have higher education and work abroad.

From the history it is known that the patient is suffering from calculous cholecystitis for a long time (10 years). She had a conservative treatment in medical establishments in Kharkov city and she was in China (2012, 2013) in the clinic using unconventional Chinese medicine (acupuncture, moxibustion, vacuum massage) twice.

After a visit to Sri Lanka in 2013, she felt worse. She was bothered by pain in the right hypochondrium, diarrhoeal (Dyspepsia) phenomenon and diarrhea (or

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diarrhoea). She applied to the District Hospital Center where she was advised to study clinical blood analysis, urine analysis and stool at the I/g.

In these studies there were detected no changes. It was recommended to try "Vormil" 400 mg 1 time per day (3 days). After taking the drug status of her health has been seemed better. The patient started feeling itchy skin.

From the words of the patient after scratching on the skin started to appear some hairs.

At the time of the survey, September 25, 2013: a sick above average growth, a few low power. Patient adequate, well oriented in time and space. Neurological status without conditions. Tendon reflexes are normal. No pathological reflexes.

Thyroid and peripheric lymph nodes are not palpated.

Pulm- vesicular breath

Cor-clean, rhythmic tones

BP 130/80 mmHg, Ps 76 beats per minute, satisfactory qualities.

The abdomen is soft, slightly painful in the right podreberie. The liver at the edge of costal arch.

Pasternackiy Symptom is negative on both sides.

Stools and diuresis without features.

Locus morbi

Leather trunk, upper and lower extremities somewhat dry, turgor and elasticity of the skin.

With rubbing skin, arms and lower legs for a few seconds in 10-15 min would appear dark "hairs" from hair follicles.

In the study of new hairs a laboratory doctor with 30 years of experience in dermatology and Venereology defines them as "textile yarn", i.e., the keratin in the product does not identify. The clinical blood test, urine and stool testes are without pathological changes.

Patient has to do an antipruritic therapy in the form of corticosteroid ointments.

The patient did not addressed to the Department of Dermatology, Venereology and AIDS.

**References.**

1. Dunn, J.; Murphy, M.B., Fox, K.M. (2007). "Diffuse Pruritic Lesions in a 37-Year-Old Man After Sleeping in an Abandoned Building". *Am J Psychiatry* 164 (8): 1166–1172. doi:10.1176/appi.ajp.2007.07030381. PMID 17671278.
2. "Unexplained Dermopathy (aka "Morgellons"), CDC Investigation". Centers For Disease Control. 2007-11-01, as of 2011-05-09 last updated on 2011-03-24.
3. Pearson, Michele L.; et al. (January 2012). "Clinical, Epidemiologic, Histopathologic and Molecular Features of an Unexplained Dermopathy". In Egles, Christophe. *PLoS One* 7 (1): e29908. doi:10.1371/journal.pone.0029908. Retrieved 2012-01-25.
4. Aleccia, JoNel. "Mystery skin disease Morgellons has no clear cause, CDC study says". msnbc.com. Retrieved 26 January 2012.
5. Vila-Rodriguez, F; Vila-Rodriguez F, Macewan BG (2008). "Delusional parasitosis facilitated by web-based dissemination". *Am J Psychiatry* 165 (12): 1612. doi:10.1176/appi.ajp.2008.08081283. PMID 19047336.
6. "Morgellons Disease". Oklahoma State University, Center for Health Sciences.
7. Savely, V.R.; Leitao, M.M.; Stricker, R.B. (2006). "The mystery of Morgellons disease: Infection or delusion?". *Am J Clin Dermatol* 7 (1): 1–5. doi:10.2165/00128071-200607010-00001. PMID 16489838.
8. Murase, J.E.; Wu, J.J.; Koo, J. (2006). "Morgellons disease: A rapport-enhancing term for delusions of parasitosis". *J Am Acad Dermatol* 55 (5): 913–914. doi:10.1016/j.jaad.2006.04.042. PMID 17052509.
9. Savely, Virginia R; Stricker, Raphael B (October 2007). "Morgellons disease: the mystery unfolds". *Expert Review of Dermatology* 2 (5): 585–591. doi:10.1586/17469872.2.5.585. Retrieved 2008-06-07.
10. Savely, Ginger; Leitao, Mary. "Delusions of Parasitosis versus Morgellons Disease: Are They One and the Same?". International Lyme and Associated Diseases Society. Archived from the original on 2008-01-21. Retrieved 2008-06-11.

11. Sara A. Hylwa, BS; Jessica E. Bury, MD; Mark D. P. Davis, MD; Mark Pittelkow, MD; J. Michael Bostwick, MD (May 16, 2011). "Delusional Infestation, Including Delusions of Parasitosis: Results of Histologic Examination of Skin Biopsy and Patient-Provided Skin Specimens". *Arch Dermatol*. doi:10.1001/archdermatol.2011.114.

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