Brief Report

required for establishing appropriate treatment methods. Actually, the histopathological examination, reported by the authors, showed only mild lymphocytic infiltration, and failed to reveal evidence of any microorganism; moreover, the polymerase chain reaction for *B. burgdorferi* resulted negative on patient's serum, exactly as ascertained in our above mentioned case<sup>1</sup>, all elements in favor of MD psychogenesis.

# **CONFLICTS OF INTEREST**

The authors have nothing to disclose.

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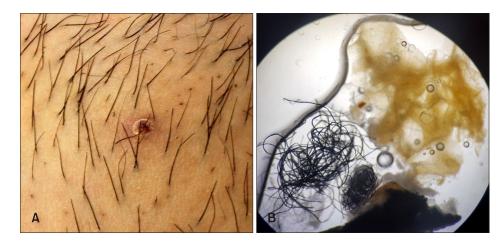
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# Morgellons Disease: a Manifestation of Psychiatric Disorder

#### Dear Editor:

We appreciate your interest in our case report of Morgellons disease (MD), and agree with your idea<sup>1</sup>. The notion that MD is a manifestation of psychiatric disorder is supported by scientific evidence, using a field emission gunenvironmental electron scanning microscope equipped with an X-ray microprobe<sup>2</sup>. It is an ingenious approach to find out the component of fiber through electron microscope and to carry out site inspection together.

In addition to a previous report<sup>3</sup>, we recently experienced one more MD patient without any evidence of infectious etiology, including Borrelia burgdorferi. A 19-year-old woman was referred from Department of Internal Medicine. Her chief complaint was fiber like materials and bugs protruding from the skin with pruritus. Multiple erythematous crusted papules were observed over whole body (Fig. 1A). She had applied topical agents (lindane and permethrin) many times and taken oral medications (ivermectin and pyrantel pamoate). Those medications were ineffective to alleviate the symptoms. Dermoscopic examination of the fibrous material revealed that inorganic black colored fibers were mixed with keratin materials (Fig. 1B). The histopathologic examination of cutaneous lesion in pubic area revealed non-specific inflammatory cell infiltration. Periodic acid-Schiff and Grocott's methenamine silver stain were negative. There was no evidence of microorganism, including tuberculosis in culture study. In addition, B. burgdorferi polymerase chain reaction test in serum was negative. She was diagnosed as having MD based on the history and laboratory findings. After taking anti-histamine (fexofenadine) and anti-psychotic medication (aripiprazole) for two weeks, the patient made a statement that the fiber like materials in the body and pruritic symp-



**Fig. 1.** (A) Photo of the crusted papule with fiber like materials on the pubic area. The patient claimed to have bugs protruding from the skin lesion. (B) Dermoscopic examination of the fibrous material revealed that inorganic black colored fibers were mixed with keratin materials.

tom disappeared, except protruding bugs.

Shah et al.<sup>4</sup> examined the psychological profile of the patients with delusional infestation, which have high rates of anxiety, depression, and appearance-related concerns. In this line, patients with MD may benefit from psychiatric treatment. Additionally, building a trustful therapeutic relationship to use antipsychotic drug is essential, considering the fact that most patients refuse psychiatric intervention. A careful approach and a close collaboration of dermatologists and psychiatrists is needed<sup>5</sup>. In the future, a study to find the most effective medication to treat MD should be investigated. Herein, we reported a 19-year-old MD patient. A reliably established doctor-patient relationship along with psychiatric medications made the symptoms of MD relieved. In conclusion, MD could be controlled effectively by establishing the patient-doctor relationship and by proper psychiatric intervention.

# **CONFLICTS OF INTEREST**

The authors have nothing to disclose.

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## Da-Ae Yu, Jungyoon Ohn, Kyu Han Kim

Department of Dermatology, Seoul National University College of Medicine, Institute of Human-Environment Interface Biology, Seoul National University Medical Research Center, Laboratory of Cutaneous Aging and Hair Research, Biomedical Research Institute, Seoul National University Hospital, Seoul, Korea

> ORCID: https://orcid.org/0000-0001-8376-9090 https://doi.org/10.5021/ad.2018.30.3.362