

FAMILY PRACTICE IMAGE

Delusional parasitosis (Ekbohm's syndrome)

Delirio de parasitación (síndrome de Ekbohm)

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A woman in her 1960s with no medical history presented for evaluation of skin lesions that had been present for approximately one year. She had no other extracutaneous or oral symptoms. Physical examination (Fig. 1, A–D) revealed ulcers of generalized involvement, with the exception of the scapular region, and predominantly on both pretibial aspects. The ulcers had a well-defined border with fibrinous exudate on the surface and converged to form tortuous and irregular courses. They did not cause any symptoms. The patient had previously undergone autoimmune tests at another center, including antinuclear antibodies and antibodies against intercellular substance and epidermal basement membrane, thyroid hormones and levels of vitamins B9 and B12, which were within normal limits. A skin biopsy had also been performed, with a histological result of ulceration, with no evidence of vasculitis or blistering disease. She had been treated with multiple courses of antibiotics and systemic corticosteroids, without improvement. In the detailed anamnesis, the patient reported being “infested” with tiny parasites crawling all over her skin, which she brought in two glass containers (Fig. 1, E). Her son, who did not have these symptoms, corroborated her report of being infested. A toxicology screen with stimulants (cocaine and amphetamines), a baseline analysis and a cranial axial tomography scan were performed in the emer-

gency department. All tests were within normal limits. After a joint assessment with the psychiatric department, the diagnosis of delusional parasitosis (DP) was agreed upon. Treatment was started with risperidone 1 mg/day, combined with cognitive behavioral therapy, outpatient treatment and close follow-up. At 3-month follow-up, the patient was asymptomatic.

Delusional infestation, also known as Ekbohm's syndrome, is characterized by the patient's firm and persistent belief that their skin, body or immediate environment is infested with small living (or, less commonly, inanimate) pathogens, despite the lack of medical evidence to support this. It is a psychodermatological disorder that can severely impair the quality of life of those who suffer from it.¹ Its pathophysiological mechanism involves uncertain dopaminergic imbalances and dysfunction of the dopamine transporter system. The diagnosis is complex and requires the exclusion of other entities that may cause similar skin lesions, such as blistering diseases or some infections (syphilis, Lyme disease, deep fungal infections, true parasitosis, etc.). Other conditions such as dementia, vitamin B9 or B12 deficiency, or stimulant use (especially amphetamines and cocaine) must also be ruled out.² A characteristic sign of this condition and helpful in diagnosis is the “matchbox sign” or “ziploc bag sign” or “specimen sign”, which refers to the tendency of DP patients to collect and store samples of what they believe to be parasites (such as skin, hairs, fibers, crusts, etc.) and bring them to medical appointments in matchboxes, jars or other small containers.¹ This sign was present in our patient. Treatment can be challenging and is usu-

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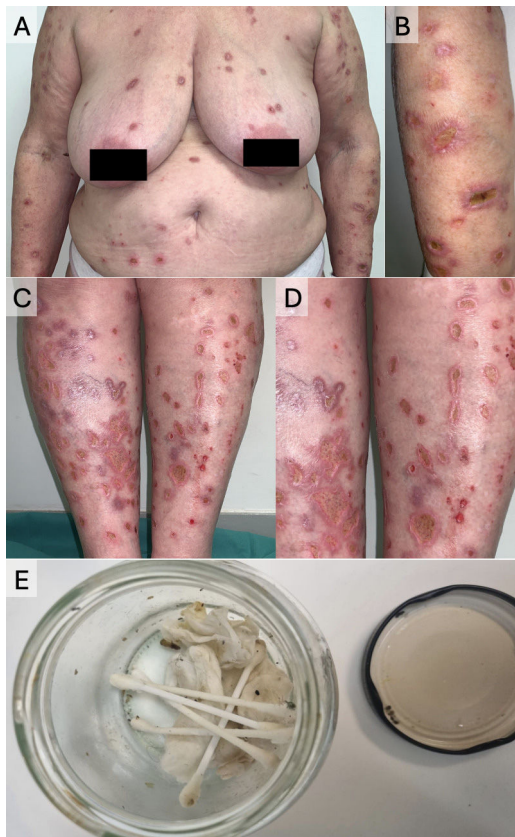


Figure 1 Clinical presentation of the lesions and 'matchbox sign'. (A–D) Ulcers of widespread distribution, linear and sinuous patterns, converging in geometric arrangements, with well-defined borders and fibrinous exudate on their surface. (E) Glass container brought by the patient where she reported storing parasites (matchbox sign).

ally a combination of both psychiatric, with antipsychotics such as pimozide, risperidone or aripiprazole (the latter two more recently used), and dermatological (with treatment of lesions and possible secondary bacterial superinfections).³ Recently, dupilumab has been postulated as an adjunctive treatment to antipsychotics, particularly in patients with intractable pruritus.⁴ Close joint monitoring and ensuring adequate adherence to treatment are important, as relapses are common.^{1,2}

Recognition of PD is essential for every clinician to avoid unnecessary procedures and therapies. Mental health is becoming increasingly important, and this case is an example of this.

Authorship

All authors had access to the data and played a role in writing this manuscript.

Authors' contributions

- Miguel Mansilla-Polo and Daniel Martín-Torregrosa managed clinical treatment and procedures, contributing to the development of this paper.
- Rafael Botella-Estrada supervised the work.

Informed consent

Oral and written consent was obtained to publish this image.

Ethics

Procedures followed here were in accordance with the ethical standards of the responsible committee on human experimentation and with the Helsinki Declaration of 1975, as revised in 1983. We have not use patients' names, initials, or hospital numbers.

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Conflict of interest

The authors have declared no conflicts of interest.

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