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Delusions of parasitosis

What are delusions of parasitosis?

As the name suggests delusions of parasitosis is a condition where an individual has the mistaken belief that they are being infested by parasites such as mites, lice, fleas, spiders, worms, bacteria, or other organisms.

Who gets delusions of parasitosis and what is the cause?

The cause of delusions of parasitosis is unknown but it has been classified as a monosymptomatic hypochondriacal psychosis. This term is used to describe patients with a single fixed hypochondriacal delusion sustained over a considerable period but not secondary to another psychiatric illness. Apart from their delusions of parasitosis, patients may have an otherwise normal personality or more commonly an acceptable degree of eccentricity with a tendency towards social isolation.

Delusions of parasitosis have also been associated with other psychiatric illnesses including schizophrenia, obsessional states, depression, bipolar disorder and anxiety disorders. This is known as secondary delusions of parasitosis.

Delusions of parasitosis occur most commonly in white middle-aged or older women, although people of all races, sex and age can be affected.

What are the signs and symptoms of delusions of parasitosis?

People suffering from delusions of parasitosis often describe the infestation as being in or under the skin, just inside body openings or in sputum, inside their stomach or intestines, and in their surrounding habitat such as their bed, couch or throughout their home.

Characteristic symptoms include:

- Patient seeking numerous opinions from medical doctors, exterminators, hygienist and entomologists, then often complaining about the incompetence of the advice received and treating the specialist with hostility and suspicion.
- Sensations of itching, burning, crawling and biting that may lead to self-mutilation as the sufferer attempts to dig out the parasites. This causes minor scratches to gouged out pits and ulcers.
- Exhibit the "matchbox sign" which is where the sufferer offers for examination specimens kept in a small container such as a matchbox. Specimens usually consist of fragments of skin, hair, dried blood or scabs. Sometimes they may include living organisms such as ants or flies.
- Extreme measures may have been taken to cleanse the skin and to disinfect or even destroy clothing and furniture.

One or more family members sometimes share delusions of parasitosis. When two family members are involved, usually husband and wife or parent and child, the delusion is known as folie à deux (craziness of 2).

Excoriations due to delusions of parasitosis



How is the diagnosis made?

Complete physical examination and appropriate laboratory tests can help to identify other diseases that mimic delusions of parasitosis and rule out any true infestations, e.g. with [scabies](#).

- Skin scrapings and biopsies
- Complete blood count
- Chemistry profile
- Thyroid function tests
- Mineral and vitamin measurements, e.g. Vitamin B12, ferritin (iron)

A history of drug abuse with cocaine, methylphenidate, or amfetamines must also be ascertained as these substances can induce the sensation of itchiness.

What is the treatment for delusions of parasitosis?

The management of patients with delusions of parasitosis is often difficult as they are totally convinced of the existence and infestation of “their” parasites. Sometimes the disease may get better and go away on its own but in most cases treatment with psychotropic medications is usually necessary. Often management of these patients is best handled through the cooperation of dermatologists, psychiatrists and entomologists. The following points should be taken into consideration when treating a patient.

- Considerable tact and repeated visits are needed to gain the patient's trust before broaching the actual existence of the infestation and noting that the problem is a psychiatric illness.
- Do not “use the delusion” to encourage patients to accept certain treatments. For example getting a patient to take a psychotropic drug by telling them that this will “kill the parasites” only reinforces and validates their delusion.
- Sufferers are often reluctant to seek psychiatric help, and if suggestions to do so by a doctor or dermatologist are not made carefully, the patient may not return for future visits.
- Some patients may be able to live with their infestation without drug or psychiatric treatment by receiving appropriate reassurance, support and attention from their doctor or dermatologist.
- Antipsychotics such as pimozide, risperidone and olanzapine have all been used but should only be started under supervision from a dermatologist or psychiatrist.
- Depressive symptoms should be screened for and treatment of depression may be useful.

Related information

References:

- Book: Textbook of Dermatology. Ed Rook A, Wilkinson DS, Ebling FJB, Champion RH, Burton JL. Fourth edition. Blackwell Scientific Publications.

On DermNet NZ:

- [Itch](#)

- [Insects & mites](#)

Other websites:

- [Delusions of parasitosis](#) - emedicine dermatology, the online textbook

Books about skin diseases:

See the [DermNet NZ bookstore](#)

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DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a [dermatologist](#) for advice.

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