



Delusory Parasitosis

- aka “DP”
- Ekbom’s Syndrome
- Delusions of Parasitosis
- Psychogenic Parasitosis




Delusory Parasitosis




Ekbom Syndrome: The Challenge of “Invisible Bug” Infestations

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Delusory Parasitosis
Nancy C. Hinkle





Ekbom Syndrome

- Characterized by the perception that one’s body is infested by invisible ‘bugs’ such as mites or insects, despite evidence to the contrary
- Tactile sensations (stinging, burning, itching, crawling, etc.) and visualized in a variety of forms.

Typical Delusory Parasitosis Scenario

- Client has been experiencing some sort of “bites” (i.e., a biting sensation)
- Often has small “bite” marks, usually on trunk, neck, legs, face
- Cannot find actual causal agent
- Attributes problem to an invisible insect/mite (but then they describe what it looks like)

Typical Delusory Parasitosis Scenario

- Reports seeing something jump and/or fly
- Often describes very elaborate and complex “life cycles” of the organism
 - Multiple stages with very different appearances (much like some insects)

Typical Delusory Parasitosis Scenario

- Often very candid in explaining details of their personal life (anatomical details of their problems, bodily functions, sexual habits).
- Will refute or explain away any explanations contrary to their theory of the causal agents (“mutations”, “new bugs”)

The Usual Suspects

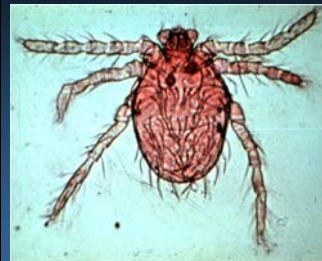
- Insects/arthropods commonly blamed
 - fleas
 - bed bugs
 - lice
 - mites - chiggers, bird mites, dust mites
 - spiders
 - ticks



Straw Itch Mites

- *Peymotes tritici*
- Bites occur on the trunk of the body. The bites result in erythematous welts. Straw itch mites breed in straw, hay, rushes and other grasses.

Chiggers (aka “Red Bugs”)



- Larva of the harvest mite will parasitize most wild and domestic animals.
- On wildlife, chiggers become replete several days after attachment.
- On humans, chiggers are usually scratched off within several hours of attachment.

Chiggers

- Bites can produce a dermatitis or vesicular lesions.
- Bites are usually located on the lower extremities where garments constrict the skin.



Childers et al.: Thrips Species Biting Man

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A REVIEW OF THRIPS SPECIES BITING MAN INCLUDING RECORDS IN FLORIDA AND GEORGIA BETWEEN 1986-1997

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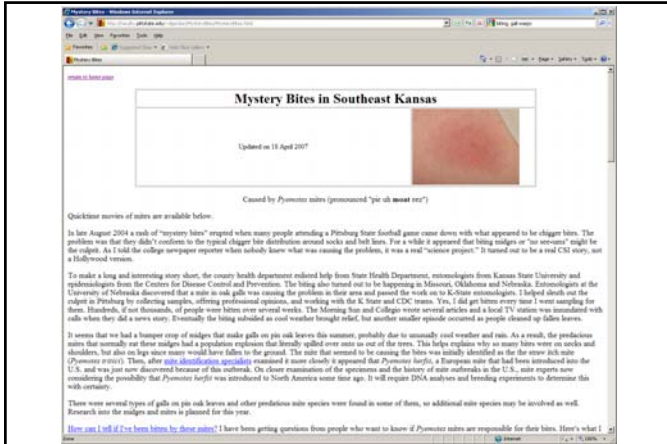
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ABSTRACT

Two species of thrips (*Frankliniella tritici* and *Limothrips cerealium*) were reported biting people in Georgia during 1986 and 1990. *Frankliniella bispinosa* was the only thrips species documented biting people in Florida between 1986 and 1997. This species occurs in great abundance throughout Florida and is a recognized plant pest on numerous crops. Because of the tremendous numbers of *F. bispinosa* that are produced on dozens of different cultivated and weed host plants during the spring months, this species can become a serious nuisance problem. *Frankliniella bispinosa* will bite people and produce variable reactions from slight irritation to formation of a rash with associated intense itching that can last for several days. The problem usually is seasonal and associated with maximum seasonal increase in *F. bispinosa* populations and favorable environmental conditions that can occur anytime between February and April in central and south Florida. Colored sticky-trap tests in Florida demonstrated the strong attraction of both white and blue colors to *F. bispinosa*. People wearing white or blue colored clothing tend to be more at risk of being bitten by this thrips pest.



Northern Fowl Mite *Ornithonyssus sylviarum*



- Parasite of nestling birds.
- In the spring when nestlings fledge, mites abandon nests
- Multiple bites results in a dermatitis results

Delusory Parasitosis

- Majority of DP sufferers are:
 - Female
 - 40+ years old
 - Well-educated - most with degrees**

Delusory Parasitosis

- **Stress** - Personal/professional issues
 - Job dissatisfaction
 - Divorce, illness (them) or recent illness/death in the immediate family
 - PTSD
- Other undiagnosed (misdiagnosed) illnesses that present similar symptoms/side effects

Delusory Parasitosis

- Problem usually at home
 - Usually one
 - Sometimes spouse and/or children
 - Individual is concerned about carrying the pest to work, or to another home, to their car, etc.
 - Some visitors become “infected” and take the pest home to their homes and/or cars

Delusory Parasitosis

- Industrial situations
 - Often multiple cases
 - May result in workman’s compensation claims and investigation by NCDOL/OSHA or NCDHHS (Industrial Hygiene)
 - Causal agent - “paper mites”, imported items



Remedies Tried

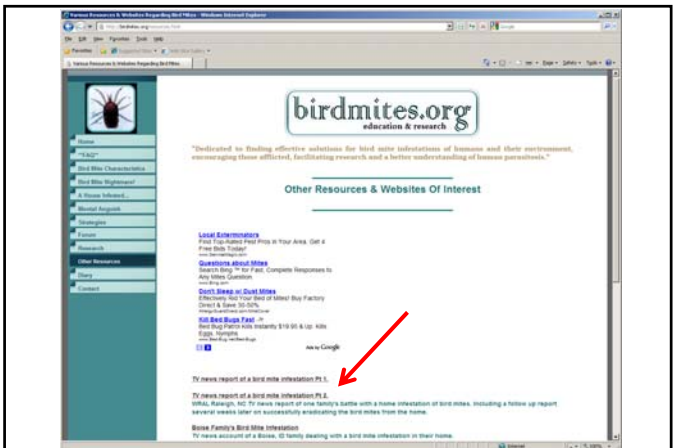
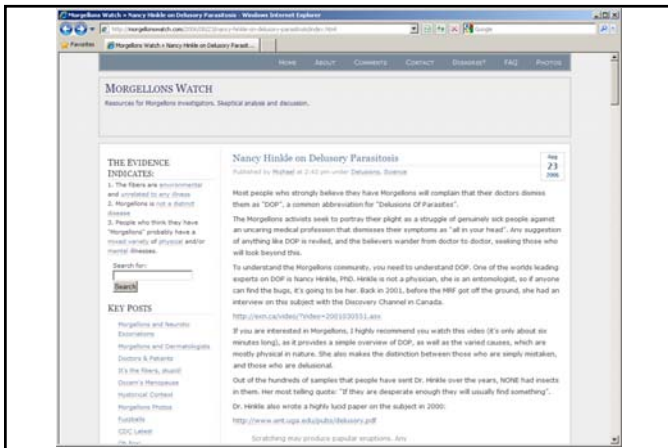
- Repeated washing/drying and changing of bed linens, towels, clothing, etc. (often several times daily and often ruining items)
- Repeated carpet cleaning
- Discarding of “infested” clothing, furniture, mattresses, etc.

Remedies Tried (applied to the body)

- Prescription or OTC lice and scabies treatments (e.g., permethrin, malathion, ivermectin)
- Insect repellents (DEET)
- Household insecticides**
- Bleach
- Kerosene

Remedies Tried

- Bathing 2-4 times daily (sometimes using vinegar)
- Alcohol, neem and other essential oils, other “natural” chemicals, non-insecticidal lotions
- Scraping/excoriation (scissors, knives, etc.)





Samples Sent to the PDIC

- Glue boards
- Vacuum cleaner bags
- HVAC filters
- Scotch tape (pressed against skin)
- Skin samples
- Clothing - panty hose, shirts
- Other items (bed linen, pillows)
- Liquids of suspect origin ←

Clinic Samples

http://www.headlice.org/report/research/index.html - Microsoft Internet Explorer

Address: http://www.headlice.org/report/research/index.html

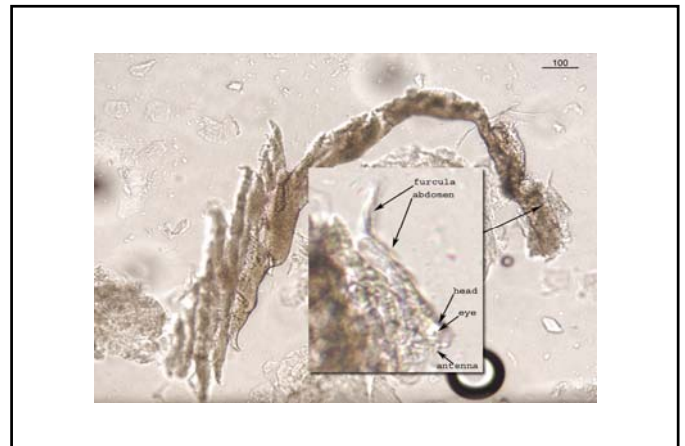
HeadLice.Org

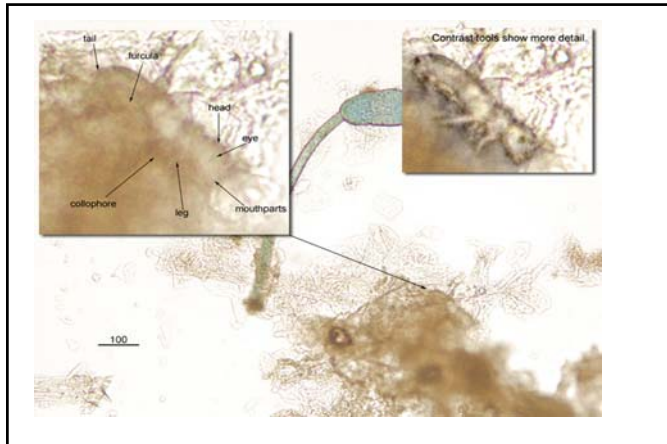
COLLEMBOLA (SPRINGTAILS) (ARTHROPODA: HEXAPODA: ENTOMGNATHA) FOUND IN SCRAPINGS FROM INDIVIDUALS DIAGNOSED WITH DELUSORY PARASITOSIS

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Abstract - Twenty individuals diagnosed with delusory parasitosis participated in a single site clinical study under the auspices of the National Pediculosis Association (NPA) and the Oklahoma State Department of Health. The objective of this study was to determine if there were any common factors in skin scrapings collected from this population. These individuals, whose symptoms were originally attributed to lice or scabies, were part of a larger group reporting symptoms of stinging/biting and/or crawling to the NPA. Multiple skin scrapings from each person were microscopically examined. Any and all fields of view that appeared incongruous to normal human skin were digitally photographed. When the photographic images were initially evaluated, no common factor was identified. However, more extensive scrutiny using imaging software revealed evidence of Collembola in 19 of the 20 participants.





Resolution of DP Cases

- Most (90%??) individuals stop calling us
 - Call another agency (NCDA&CS, NCDENR, county EH)
 - Just give up on us
- Some call back to say that they were “cured”

What Should You Do?

- Be Supportive
 - Listen
 - Ask questions to help clarify what they’re telling you.
 - Don’t get too personal with questions/comments

What Should You Do?

- Be Supportive
 - Don’t challenge but don’t passively affirm their ideas/position when there is no proof at hand.
 - Avoid using the “DP” term
 - What can “mimic” a biting sensation

What Should You Do?

- Be Sure of your comments/statements
 - What you say can become “fact”
 - Admit if a question is beyond the scope of your background, best directed to an entomologist or physician

What Should You Do?

- Recommend that they discontinue pesticide applications in the house and to themselves:
 - The hazard to them (and possibly their family)
 - Applications can mask the actual problem

What Should You Do?

- If possible, get some samples (give some guidance)
 - Glue boards
 - Tape pressed against skin (attach to index card or paper)
- Recommend that client seek medical assistance, preferably a specialist (dermatologist, allergist, etc.)

CONTACT US FOR ASSISTANCE



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