C. R. Connelly

*Delusory Parasitosis*

University of Florida
Florida Medical Entomology Laboratory
Vero Beach, FL
Healthy respect of insects

Entomophobia

Delusory Parasitosis

OUT THERE
Healthy Respect of Insects

- Avoid bees and wasps
- Wear mosquito repellents
- Pest control for roaches
- Being aware of fire ant mounds
- Majority of the general population fall under this category
Entomophobia

• The abnormal, irrational fear of insects and other arthropods
• Emotional reactions
• Anxiety
• Panic Attacks
Delusory Parasitosis

- The unshakable belief that organisms, such as mites or insects, are present in or on the skin
- And/or a belief that their environment is infested (automobiles, furniture, clothing)

- In real cases of delusory parasitosis, THERE IS NO INSECT OR ARTHROPOD INVOLVED
“Symptoms” of Delusory Parasitosis

- Hives
- Rashes
- Tingling of the skin
- Pins and needles feeling the body
- Itching
- Redness of the skin
- They can’t find a “cure” or a “cause”
Symptoms: Waldron, 1962

• Black or white when first noted – later will change color
• “Bugs” often jump
• Infest hair
• May come out of common household items – toothpaste, cosmetics
• “Infestation” forces person to move out of home – but the bugs “follow” them and appear in new dwelling
“Symptoms” – Hinkle, 2000

- Waxy looking fuzz balls
- Granules size of sand or salt
- Long hairs that move independently
- Worm-like
- Classic patient/client: Women, 50 and older, living alone
Delusory Parasitosis
Delusory Parasitosis
Typical Scenario

• Phone call or walk-in describing an “infestation” of some insect on the body
• Itches, scabs, sores
• Brings in “sample” of the bug
  – On tape, in baggies, in empty prescription bottles
Typical Scenario

• If you don’t find anything, they want you to come to their home and collect samples
• Belief that they have some “new” insect that needs to be researched
• Many professionals involved/consulted
Case File #1
Linda L.

- Female, 30’s
- Daughter sent home from school – head lice
- Head lice treatments
- “Team of 5 pathologists”
- School Nurse
Case File #1
Linda L.
Case File #1
Linda L.

• Home visit
• Insecticide powder & dehumidifier
• Beds stripped of linens
• Family living in a hotel
• Clear-cut case of entomophobia
Case File #1
Linda L.

- A rookie mistake!
- Microscope and textbook (mutant?)
- One more “sample” from son
- Elation
- Status: Case Closed
Case File #1
Linda L.

- 6 months later…call from husband
- You won’t believe this!
- STATUS: Unknown
Case File #2
Mrs. Y.

- BugMasters contacted me
- Female
- Age 80, widow
- 3 home visits
- Bugs were chewing her clothes, destroying her mattress, eating her furniture, and moving her jewelry
Case File #2  
Mrs. Y.

- BugMasters contacted me
- Female
- Age 80, widow
- 3 home visits
- Bugs were chewing her clothes, destroying her mattress, eating her furniture, and moving her jewelry

I now believe that the insects and/or bugs that are chewing my mahogany furniture, chewing and picking at the wallpaper and upholstery and yes, even biting me, might have been carried home in my luggage or clothing from my relatives homes in Taunton and Middleboro, Massachusetts. I say that because the same markings were on a table in a booth in a restaurant in Middleboro, Massachusetts where my niece and I had lunch.
Case File #2
Mrs. Y.

- I recommended an allergist

This is in reply to your letter of 16 September 2003. I am being treated for angina by a leading cardiologist in Vero. I have a competent primary physician in whom I have the utmost trust and confidence. I have an outstanding eye surgeon and an EEN&T doctor who takes care of my ears. Several years ago I had a bleeding duodenal ulcer and am receiving ongoing treatment. This physician prescribed ZANTAC. I take a 150MG capsule in the morning and one in the afternoon. Try buying that over-the-counter.
Case File #2
Mrs. Y.

• I recommended an allergist

This is in reply to your letter of 16 September 2003. I am being treated for angina by a leading cardiologist in Vero. I have a competent primary physician in whom I have the utmost trust and confidence. I have an outstanding eye surgeon and an EENT doctor who takes care of my ears. Several years ago I had a bleeding duodenal ulcer and am receiving ongoing treatment. This physician prescribed ZANTAC. I take a 150MG capsule in the morning and one in the afternoon. Try buying that over-the-counter.

I do not have Alzheimer's disease; mental depression; dementia. I am not suffering from hallucinations. I am
Case File #4
Mr. Z

- Male
- Divorced, lives alone
- Attacked by hundreds of biting flies
- Fogged “repeatedly”
- While killing one (probably the Queen) entire body jolted like an electric shock and then little ones covered him from head to toe
Case File #4
Mr. Z

- “If I scratch (they bite slightly) they’ll fly into my eyes, sometimes up my urethra and bite me, if they’re PO’d
- Adults learn to stay away till night
- When I’m bathing, they can fly through the water as if it was air
- “I went to a dermatologist, he took a biopsy. I told him he’d need to seal it or they’d fly away. He didn’t, it was negative.”
- “They learn quickly….I can’t catch them…”
- He sent many “samples” – NO INSECTS

STATUS: No response, client went away - UNSOLVED
Case File #5
Gary G.

- Male
- Age 40 – 50
- Swarmed out of suitcase from trip to Atlanta
- Several head lice treatments, natural tinctures, insecticide bombs, professional PCO’s
- Sister in Tampa also has same problem
- Dermatologist
Case File #5
Gary F.

- Secret Claim from CDC
- New Bug
- Mutations
- Microscope and textbook showed him a real insect
- Status: Unsolved - Closed business, left town
Commonalities from DP
Clients at FMEL

• Eight years at FMEL ~35 cases
• Have seen many professionals
• Can not “catch” the organism
• “Insect” behaves in ways that no insect behaves
• Spreads among family members
• Repeated use of pediculicides and insecticides
Commonalities from DP Clients at FMEL

- Buy their own microscopes
- “Researched extensively”
- Start out defensive
  - Not delusional
  - Not crazy
  - “Don’t have the matchbox sign”
- Various stages of “morph”
  - Use of entomological/biological terms, and in senseless combination
- Mutants
- Fibers in sores/scabs
What is the cause?

• Prescription or OTC
  – Single or multiple
• Household Allergens
  – Oven cleaners, fiberglass insulation, detergents
• Psychological
• ?????????????????????????????
Role of the Medical Entomologist

• **Determine whether or not there is arthropod involvement**
• Establish a protocol for your lab/office
  – Phone calls, Walk in, Email
• Form
• Emphasize that your role is to identify the insect; if there is no insect or no sample, there is nothing you can do.
• Remind client that entomologists can not diagnose human illnesses
• Refer to allergist
• Provide a fact sheet
• Will consume many, many hours of your time
• Will continue coming back as long as you leave the door open
• Will ask you to “research” their particular bug – must be some previously undiscovered organism
• Most cases will remain unsolved (other than being classified as DP)
When you encounter a DP client,
May you be the lucky one to actually find an insect