

Approaching patients with delusional infestation

Please note that the following recommendations have not been widely researched. It is important that these recommendations are made only by an experienced General Practitioner (GP) or other experienced health practitioner. For all other parties involved, do not attempt to convince patients that the disorder is psychological.

DO:

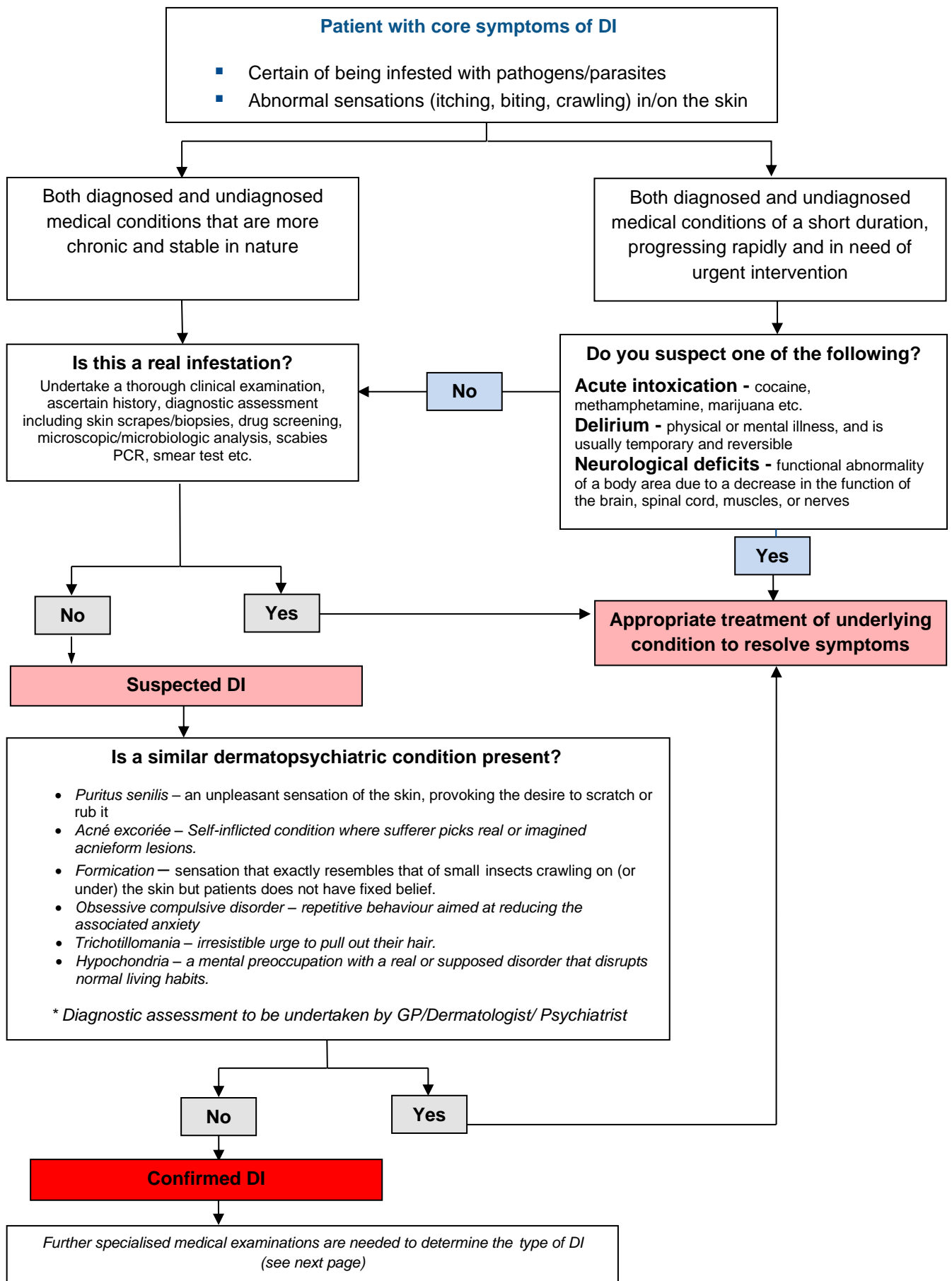
- Take time, annotate the patients history, including trips to tropical locations.
- Perform the diagnostic investigations needed (even if you are sure that the patient has no infection), as clues to underlying medical or psychiatric problems may be revealed.
- Check for triggering and contributing factors such as new medication or drug use.
- Examine all specimens carefully, or refer specimens to an appropriate laboratory who can then refer them on to the Medical Entomology team at the Department of Health for assistance with invertebrate organism identification.
- Be certain of the diagnosis.
- Acknowledge the patient's suffering, show empathy and offer to help to reduce distress.
- Paraphrase the symptoms ("you are itching"; "the sensations"; "the crawling" etc.) instead of reinforcing or questioning them.
- Indicate that you are familiar with the problem and that you were able to help other patients not instantly, but after a while.
- Use the term 'unexplained dermatopathy' if the patients asks for the diagnosis.
- Indicate that this may be due to over-activity in the nervous system and the result of normal neuron-adaptive processes in the brain.
- Ask the patient how the condition has affected his or her life to gain further insight into the patient's history and mental state.
- Ask patients with despair and signs of depression about suicidal ideation and evaluate any risk to themselves or others.

DO NOT:

- Try to convince the patient that the disorder is psychological or question the patient's beliefs.
- Refer to this condition as "Morgellon's".
- Attempt immediate psychiatric referral or try to establish psychopharmacological therapy too soon.
- Use words like 'delusion(al)', 'psychotic', 'psychological', 'psychiatric' too early (this often leads to "doctor hopping").
- Use phrases like "calm down"; "be happy it's not infectious"; "it is only psychogenic" and so on as this will upset the patient.
- Overlook aggression against or toward other health care professionals.

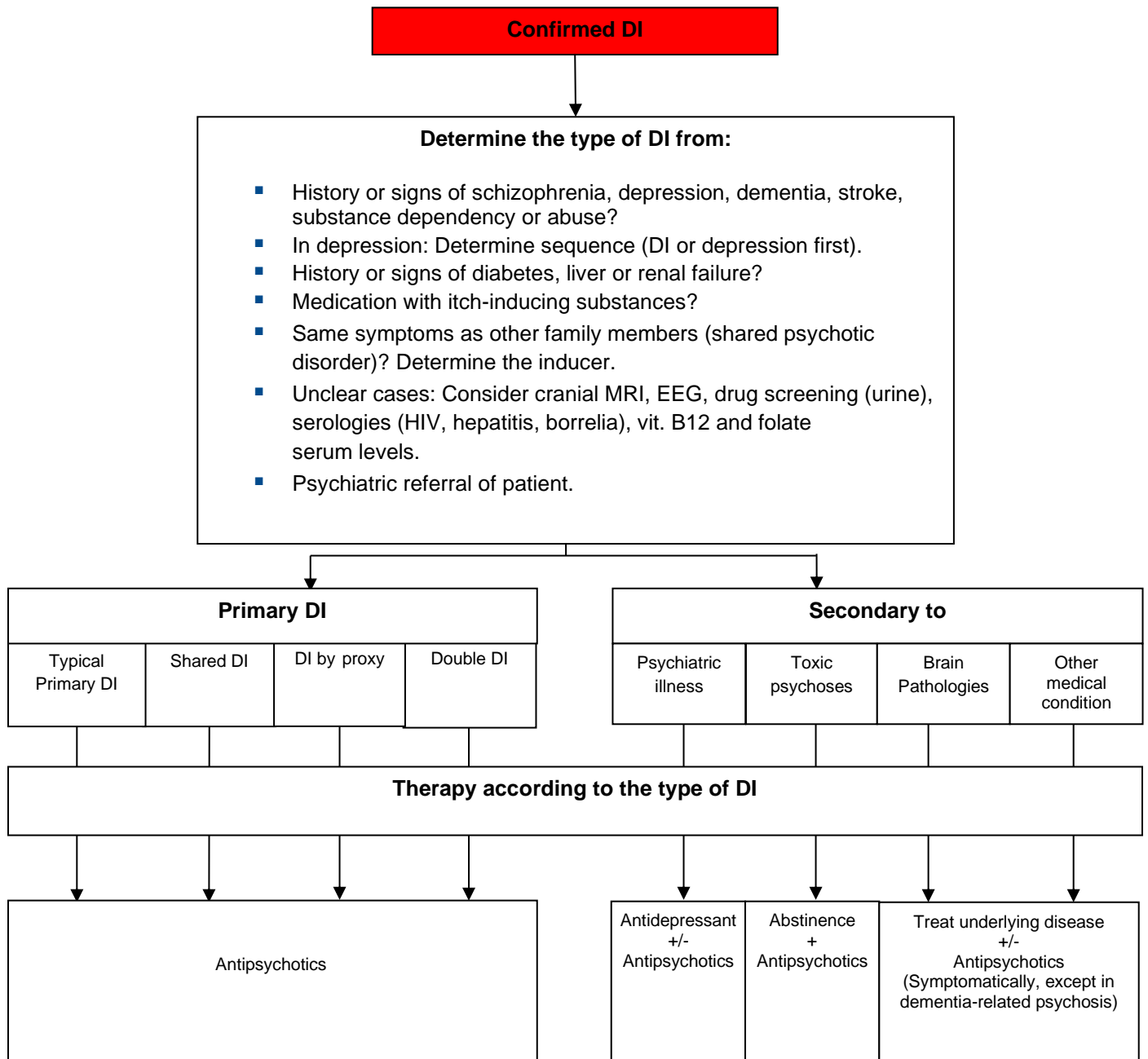
Diagnosis

The diagnosis of Delusional Infestation is a lengthy process involving the following steps:



Management

Once the diagnosis of DI has been confirmed and the patient referred to a psychiatrist, it is important to determine its exact nature. Primary DI is treated with antipsychotics, whereas secondary DI also requires the treatment of the underlying illness.



Laboratory tests that may help evaluate patients with DI

- Complete blood count and differential
- Erythrocyte sedimentation rate
- Serum glucose
- Serum electrolytes
- Liver function tests
- Albumin
- Total protein
- Thyroid function tests
- Serum total calcium
- Phosphorus
- Serum creatinine
- Blood urea nitrogen
- Vitamin B12
- Age-appropriate cancer screening
- Folate
- Iron studies
- Serum IgE (immunoglobulin E)
- Antinuclear antibody
- Rheumatoid factor
- C-reactive protein
- Urinalysis
- Urine toxicology
- Pregnancy test (if childbearing age)
- HIV (human immunodeficiency virus)
- Hepatitis C
- Rapid plasma reagin test for syphilis

List of medications and substances that can induce secondary delusional infestation

- Amphetamines
- Methamphetamines
- Cocaine and its derivatives
- Tetrahydrocannabinol (THC)
- Alcohol
- Polysubstance use
- Methylphenidate (attention deficit hyperactivity disorder [ADHD] medications)
- Armodafinil, modafinil (narcolepsy medications)
- Bromide intoxication
- Dopamine agonists (anti-Parkinson's medications)
- Phenzazine (monoamine oxidase inhibitors)
- Donepezil (cholinesterase inhibitors, Alzheimer's/dementia medications)
- Certain antibiotics (e.g. ciprofloxacin, clarithromycin)
- Corticosteroids
- Interferon α 2 plus ribavirin
- Topiramate (anticonvulsants)

Medical entomology laboratory identification service

There are a range of invertebrate organisms in the environment in WA that present a real, or potential, risk to public health. It is important to accurately identify them, to ensure the most appropriate control or treatment measures can be implemented.

The medical entomology laboratory identification service is specifically available to General Practitioners and pathology laboratories that need advice and/or assistance in identifying invertebrates of public health significance, found during sample collection, most commonly:

- Mosquitoes
- Lice
- Fleas
- Bedbugs
- Ticks
- Mites

Samples collected by licenced pest management technicians and local government environmental health representatives may also be accepted, if the specimen is collected from the surrounding environment of a client and not directly from their body.

For identification of any other insects/organisms that do not present a risk to public health, please direct enquiries to the Department of Primary Industries and Regional Development (DPIRD) [Pest and Disease Information Service \(PaDIS\)](#) (external site).

Important sample submissions information

Referring practitioners are strongly encouraged to review all samples provided to them by a patient/client, to ensure they are eligible for submission.

The following samples will be accepted:

- Samples submitted directly by a referring General Practitioner, laboratory, licenced pest management technician or local government environmental health representative; and
- Samples containing invertebrate organisms that present a real, or potential, risk to public health (e.g. mosquitoes, lice, fleas, bedbugs, ticks and mites).

The following samples will **NOT** be accepted:

- Samples containing, or suspected to contain, blood or body fluids.
- Samples submitted directly by patients.
- Samples that have not been appropriately stored/packaged by the referring practitioner prior to submission. (Please refer to the **Sample Transport and Submission Guidelines** overleaf for more information).
- Worms or worm-like specimens (please direct to a parasitologist or other appropriate laboratory).
- Other organisms or other materials or that do not present a risk to public health.

All samples submitted for identification need to be accompanied by a [Medical Entomology Laboratory Identification Request Form \(PDF\)](#). A copy of this form is also included overleaf.



MEDICAL ENTOMOLOGY LABORATORY IDENTIFICATION REQUEST FORM

Patient Information	Referring Laboratory or GP
Patient Name: <input type="text"/>	Name: <input type="text"/>
DOB: <input type="text"/>	Lab/Practice Name: <input type="text"/>
Gender: <input type="text"/>	Address: <input type="text"/>
Patient ID: <input type="text"/>	Phone: <input type="text"/>
Address: <input type="text"/>	Email: <input type="text"/>
Suburb: <input type="text"/>	

Details about the patient

Symptoms:

Any travel history:

Details about the sample

Nature of the sample:

From where was sample collected:

Other Relevant Information/Comments :

Details of the referring General Practitioner (if different from above):

As above

Name of Referring GP:

Phone number:

Address:

Email:

Submitter Name:

Submission Date:

Sample transport and submission guidelines

Specimen preparation

1. Ensure the specimen is eligible for submission through this service.
2. Complete the [Medical entomology laboratory identification request form](#) (ID Request Form).
3. Place specimen/s into an airtight plastic vial or container with a screw top lid (e.g. urine Jar).
4. To prevent damage during transport, store according to the following directions:

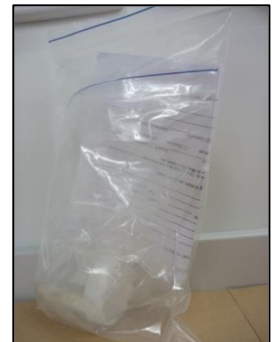
1. Place a piece of soft tissue to the bottom of the vial. Create a well space by pushing the tissue down.
2. Carefully place the specimen into the well space.
3. Fold the tissue edges gently over the specimen and screw the lid back on.



5. Clearly label the vial/collection container with the following information:

- Patient's Full Name
- Date of Birth
- Date the sample was collected.

6. Place the container into a sealable plastic bag (Ziploc or biohazard bag).
7. Seal the bag.
8. Place the bag with the sample container into a second sealable bag.
9. Place the ID Request Form into the outer bag (the second bag), ensuring it is not in direct contact with the sample container.
10. Seal the second bag.
11. Place sample bag into a foam esky, seal the esky with tape and keep in the fridge until a courier can be organised to transfer the sample to Medical Entomology.



Double bag the sample in sealable bags. Place ID Request Form in outerbag, where it is not in contact with the sample.

12. **Please call medical entomology on (08) 9285 5500 to advise of ID Request and to obtain postal address for courier, noting samples are not accepted directly from patients.**

For further assistance

Entomological identification services

Medical entomology

Environmental Health Directorate

Department of Health, Western Australia

Telephone: (08) 9285 5500

Email: medical.entomology@health.wa.gov.au

Pest and Disease Information Service

Department of Agriculture and Food, Western Australia

<https://www.agric.wa.gov.au/biosecurity/pest-and-disease-information-service-padis>

Dermatology departments for referrals

Royal Perth Hospital

Dermatology Department

Telephone: (08) 6477 5016

Fiona Stanley Hospital

Dermatology Department

Telephone: 1300 855 275

Sir Charles Gairdner Hospital

Dermatology Department

Telephone: (08) 9346 1490

Selected references

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7. Hinkle, N.C. (2011). Ekbom syndrome: A delusional condition of "bugs in the skin". *Current psychiatry reports*: 13(3) : 178-86.
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