

PATIENT INFORMATION BROCHURE

HOUSE DUST MITE ALLERGY

- House Dust Mite is a minute 8-legged creature that lives in warm, humid home environments, such as human bedding, carpeting and furniture fabric.
- They are too small to see with the naked eye, one third of a millimeter in length.
- They feed on the dead skin scales of humans. The HDM thrives in warm humid temperatures and is more common in coastal households, though they may also be found in significant numbers in Highveld homes.
- There are roughly 1,000 household mites in the average bed! The female mite lays about 50 eggs in her 6 - week lifespan.
- The main cause of allergic symptoms in humans is a protein found in the mite faeces.
- A mite will excrete about 20 pellets every day.
- Allergy to HDM is common, with perhaps 10% of the general population being sensitized, with clinical symptoms.
- Approximately 30% of all allergic patients react to HDM, making it the single most common allergen in South Africa, and may cause asthma and/or hay fever or may exacerbate eczema.
- When a patient presents to a doctor with symptoms asthma or rhinitis, the doctor should immediately suspect the mite as being a possible cause of those symptoms.

DIAGNOSIS

Skin tests or blood tests may be performed to confirm HDM allergy.

MANAGEMENT

- Avoidance of HDM, or reduced exposure.
- Pharmaceutical treatment of the symptoms with drugs. (Steroid-based nasal sprays and antihistamines)
- Immunotherapy against HDM using a vaccine. (See brochure on Immunotherapy)

NASAL DECONGESTANTS ARE NOT RECOMMENDED.

ALLERGEN AVOIDANCE

- This is the ideal “therapy”, which will obviate the need for long-term drug therapy.
- The following measures are aimed at reducing the levels of the mite and its excretion products in the home, especially the bedroom.
- Note that one or another avoidance action alone will not be successful in reducing the numbers of mites sufficiently to reduce clinical symptoms.
- It is in the bedroom that people spend an average of one third of their lives, with their faces in direct or close contact with the mites living in the bed.
- Mite avoidance measures are focused on the bedroom.

PILLOWS AND DUVETS

- Mites can live in both foam and feather pillows and duvets.
- They should be replaced every 6 months, or occlusive covers must be used. These special fabrics prevent the passage of the mite through the bedding, whilst still allowing air to pass through.
- Such occlusive air-permeable fabric protectors are available in South Africa.
- Bedding may be placed in direct sunlight for several hours every week if covers are not available.

MATRESSES

- The mattress should be completely encased with a suitable occlusive fabric. (not plastic, which is impermeable to air, and makes the bed hot and uncomfortable)
- HDM allergic persons should use the top bunk.

CARPETS

- Fitted carpets should be replaced with vinyl, wood laminate or tiles.
- A wooden floor should be waxed regularly so as to seal it.

SOFT TOYS

- Dust –collecting soft toys, books, dried flowers, thick heavy curtains, Venetian blinds, upholstered furniture and clutter should be removed from the room.
- Use closed bookcases and cabinets instead of those with open shelves.

- Window shades or washable curtains are easy to keep dust free. The room should have a minimum of furniture, preferably made of wood or plastic.
- “Special” soft toys may be washed weekly, wrapped in a plastic bag and placed in the freezer overnight to kill any mites.

VACUUMING/DUSTING

- The most effective vacuum cleaners are vacuum cleaners installed with HEPA filters or electrostatic filters at the air outlets.
- HEPA filters retain 99,9% of particles range of 0.3 to 0.5 micrometers.
- HEPA filters will also retain cigarette smoke particles which are well known irritants for allergy sufferers who have asthma and rhinitis.
- The room should be vacuumed daily if possible, or at least twice a week, by someone other than the patient.
- If the patient has to vacuum/dust, a Dust Mask should be worn.
- Mites have claws that cling to fabric, so a powerful vacuum cleaner is required.
- Twice weekly damp-dusting should be carried out on all surfaces.
- Having a water trap will not stop the aerosolisation of house dust mites via the vacuum exhaust.
- It is possible to kill HDM by treatment with a group of chemicals called Acarosides. These are not of proven benefit and do not reduce mite levels to a sufficient degree to cause a reduction in symptoms.
- Mites that have been killed by sunlight or an acaroside are still allergenic, and so they must be vacuumed up efficiently. Fortunately dead mites do not cling to fabric and so are more easily vacuumed up.
- Change the bag on the vacuum cleaner regularly.

For more information and pictures on the many species of mites visit:

http://en.wikipedia.org/wiki/House_dust_mite

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