

Enzyme Potentiated Desensitisation

This page is extracted and adapted from the [EPD FAQ site](#), administered in the USA by Stan Rohrer - a much more detailed site, which may be getting a little out-of-date now due to the problems that EPD has been having with the FDA. It still carries a large amount of information though. We are grateful for permission to use it. This is not official manufacturer's information about EPD, but we believe it gives a more human, patient-oriented view of the treatment.

What is EPD?

Enzyme Potentiated Desensitization (EPD) is a method of allergy treatment, or immunotherapy, using extremely small doses of allergens to desensitize people from their allergies. It has been seen to be effective for inhalant, food, and chemical sensitivities, along with acting on other significant health problems.

Enzyme Potentiated Desensitization (EPD)involves the administration, via skin injection, of an enzyme, beta glucuronidase, and minute doses of mixed allergens. The enzyme is used at levels already present in the body and the allergens are used in quantities much less than in conventional desensitizing treatments (allergy shots) which are no longer allowed in the UK except in hospital conditions. The treatment is safer than conventional desensitizing treatments due to the low dose of the agents. No part of the EPD treatment is derived from humans so there is minimal risk of transmitting other diseases. EPD contains a wide variety of inhalants, foods, and chemicals and is capable of dealing with most common allergy problems. The EPD doctor determines which of these groups are to be included in the patient's therapy based on that patient's symptoms and history. Customization of the injected allergens beyond the major groupings is typically neither needed nor done.

EPD stimulates the immune system to produce new T-suppressor cells, a specific type of lymphocyte, which is a type of white blood cell. These take 3 to 4 weeks to mature before they can begin their task of disabling mis-coded T-Helper cells. Essentially, this is a re-training program so the body does not react to those substances contained in the shot. The mis-coded cells are a part of the chain that stimulates the production of histamine, the major trigger of allergic response. EPD works much more closely and effectively near the root of allergy problems than many other current treatments or symptom reduction techniques.

Success rates

It was reported in one 1996 study that over 85% of the patients who have followed the protocol have permanently stopped the successful treatment after 16-18 shots, with no recurrence of the symptoms. [*I would have thought this was optimistic.*-DD]

After two years (late 1995) of the IRB/FDA study in the USA, unpublished reports indicate 55 conditions have been reviewed and the overall success rate was reported at between 76-84%. A 50% reduction in medications have been suggested by the study group, on the average. Many of the conditions appeared to be responding at a rate above 90%.

Dr. Leonard McEwen began work on the method in the mid-1960's in London. He continued the work of the late Dr. S. Popper, who had noted that hay fever symptoms were reduced as a side effect of treatments he was doing on nasal polyps using injections of hyaluronidase. Dr McEwen identified the active ingredients and he and others have since worked to refine the EPD techniques and determine the best patterns for making the treatment effective. Dr. W. A. "Butch" Shrader, Jr. is the United States counterpart in recent years. Dr. Shrader recovered from disability via the use of EPD and became interested in what it had to offer for other patients.

Over 50 disorders have been shown to respond to EPD. It has been used to treat all aspects of allergies including allergens in the inhalant, food, and chemical realms. Because having increased T-cells actively doing their thing benefits us in many ways, patients with many co-existing conditions have also improved, sometimes dramatically. EPD has been seen to have a favourable impact on conditions including:

- * Hay Fever,
- * Chronic Rhinitis,
- * Food Allergy/Intolerance,
- * Food Preservatives/Additives Sensitivity,
- * Fatigue,
- * Migraine and other Headaches,
- * Candida,
- * Chemical Sensitivity/MCS,
- * Chronic Sinusitis,
- * Asthma,
- * Ear Infections,
- * Depression,
- * Eczema (Dermatitis),
- * Arthritis,
- * Rheumatoid Arthritis,
- * Chronic Bronchitis,
- * Colitis,
- * Muscle Pain,
- * Joint Pain,
- * Migraine Headaches,
- * Hyperactivity/ADD (Attention Deficit Disorder),
- * Emotional Problems,
- * Behavioral Problems,

- * Facial Angioedema (swelling of face or lips),
- * Anaphylactic Reactions (life threatening swelling),
- * Severe/Chronic Urticaria (Hives),
- * Nasal Polyps,
- * Crohn's Disease,
- * Irritable Bowel Syndrome,
- * Ulcerative Colitis,
- * Epilepsy,
- * Post-Viral Syndrome,
- * ME, CFIDS, CFS (Chronic Fatigue Syndrome),
- * Autism,
- * Contact Dermatitis,
- * Psychological reactions to foods,
- * Ankylosing Spondylitis,
- * Systemic Lupus Erythematosus.

In the DePaul Study of 1994 (unpublished), EPD was reportedly the highest ranked of all immune system /anti-viral therapies surveyed. When compared to over 50 current treatment programs it was ranked second highest as "enormous help" behind IV gamma globulin and ranked first over this treatment on an over-all rating. The De Paul study was conducted on patients with "MCS", "Chronic Fatigue Syndrome", "fibromyalgia", and "electro-magnetic sensitivities" for which the patients had failed to get well with any previous form of treatment.

People who find relief from conventional treatments have no need to try the less-known EPD. EPD is likely to be used on the "hard" cases where other treatments have not been as successful as desired. With the "hard case" factor not extrapolated into the results, the true results for the general population may even be better than the studies show.

Mixtures

There are EPD mixtures for inhalants (e.g. dust, dust mites, pollen, animal dander, etc), foods, yeasts and bacteria, and mixed common chemicals, as well as formaldehyde. Based on the patients symptom's and history, the doctor determines the appropriate ones to use. These may be given together as one shot, or administered separately, using both arms. This is why some people may receive one, two, or three shots.

The currently available mixes are:

- * X-theta - low dose foods, inhalants, molds, bacteria, Candida, etc (The standard starting treatment).
- * XE - higher dose of the above (Suitable for certain cases).
- * IC - inhalant concentrate. Hay fever etc.
- * T - terpenes (covers perfumes, petrol + exhaust fumes, etc.)

- * F - formaldehyde (covers another set of chemicals including newsprint)
- * PK - Proteus-Klebsiella (used for some rheumatoid diseases).
- * B - Bacteroides
- * OE - odds and ends - library dust, etc.
- * W - woods
- * M - mosquito (may also work against other stinging insects).

It has been seen that EPD can produce favorable results on occasion even for allergic items which are not included in the mixes. Cross-reaction by relatives of items in the mix may be enough exposure to clear such a sensitivity. Undefined or unknown sensitivities can usually be treated without extensive diagnostic identification. This eliminates much tedious skin testing.

Safety

EPD can be used to treat patients who are extremely ill much more safely than any other form of therapy. Unlike many varieties of traditional immunotherapy, no life threatening reactions to EPD have been recorded since its inception in the 1960's. Well over 500,000 doses have reportedly been given. In the UK, traditional "incremental" desensitisation is only allowed to be given in hospital settings where emergency resuscitation equipment is available for patients succumbing to a reaction (some 26 people had died prior to the law being put in effect). EPD, on the other hand, is allowed to be administered in doctor's offices.

EPD injections contain a much smaller dose level of allergenic substances than the traditional allergy shots and are considered safe for very sensitive patients. Traditional allergy shots contain dose concentrations of between 1:100,000 [10-5] and 1:10 [10-1]. EPD contains between 1:100,000,000,000,000 [10-14] and 1:10,000,000 [10-7], which is similar to or less than the amounts used for diagnostic skin prick testing. Anaphylactic reactions to EPD serum could exist in theory, as with any injection, but the predicted chances are extremely low.

Side effects

Short-term side effects range from "none" to "as bad as you were without EPD or other treatments". About 20% of patients experience a substantial worsening of present or past symptoms, lots more get minor symptoms. Reactions generally last 1-3 days but, on very rare occasions, have been seen to last over 4 weeks. For the long ones, see your EPD doctor to see if he can determine a method of relief and of preventing them in the future. When seen, these problems generally accompany the first few shots and lessen as the treatments progress.

The worst common side-effect is not actually due to the EPD - a caffeine-withdrawal

migraine-type headache, which comes on 36-72 hours after cutting it out, and can therefore sometimes be mistaken for a reaction to the treatment.

The good news is that there are no known permanent bad effects.

Sometimes patients do have longer-lasting side effects as a result of becoming sensitive to new inhalants, foods, or chemicals. This can occur when an allergen is not identified and thus not avoided. Not following the dietary and environmental restrictions increases the likelihood of becoming more sensitive to the problem items for a period of time. Sensitivity to pet dander is one item that catches some people out in this way. Infections of any kind at the time of treatment - bacterial, viral or fungal - can also reduce or eliminate the benefits.

Sometimes patients with adverse responses quit the EPD protocol after such an event. Unfortunately they are doing themselves a disservice in that additional treatment will bring the positive results. Quitting after a negative reaction only serves to leave that allergy programmed into the system. It can then take many months (even a year or more) for the body to eradicate these mis-programmed T-cells without the aid of the EPD treatment. The people who have quit EPD, before 6 shots are completed, tend to leave with this kind of "EPD made me worse" comment.

Treatment Patterns

There are two versions of the EPD treatment plan - Simple and Complex.

Simple

Some patients may have the treatment one to three times a year for Simple seasonal allergy treatment. After a few years the number of treatments are normally decreased as they are no longer needed. The treatment covers inhalant hay fever allergies and is good for the season. Treating only inhalants, when other food or chemical allergies exist, may tend to exacerbate the other allergies.

Complex

Most patients begin the Complex program by being treated every two to three months. The Complex EPD treatment can include foods, chemicals, wood, terpenes, and a number of other sensitivities. After a period of time, perhaps a year or two, the Complex treatments are effective enough that the period can be stretched to four or more months apart and further continue to stretch the period. Many patients eventually drop to one per year or less.

Response times

There are four general responses to EPD treatments:

- * A few people see an "Immediate" reaction in the first few shots. These are seen in the hours or days following the shot and last 2-5 weeks for the lucky few.
- * The "Main Action" starts 3-4 weeks after the shot. Although each shot stimulates T-cell production, (it takes about 21 days, more or less, for them to mature and become fully functional) the surge of well-being that usually occurs at that time may be too subtle for some patients to detect until around the 4th to the 7th shots. These people often report the effect is almost as noticeable as a "light bulb being turned on". Generally by the 6th shot, most people are noting favorable response from the treatments.
- * The "Late Response" occurs after 8-12 injections, where the earlier ones seemingly had no effect or a negative effect. For this group of people, suddenly one of the shots works well and treatment continues.
- * A "Postponed Action" can occur 10-20 months after no apparent improvement and the shots have been stopped. The cure is often permanent but it also has a tendency to be confused with whatever other treatments are being tried at the time.

About 60% of cases will note some positive responses, though perhaps minimal, some time during the first 3 injections. By 6 to 8 shots people are generally seeing positive effects lasting around 2 months. Very severe illness may take 2-3 years to work, but these cases are rare.

Precautions

Because EPD is an all natural preparation, and uses nature's own pathways into the immune system, some personal restrictions have been found to be beneficial so that the treatment is not diverted into creating problems for the patient. By following these rules, the patient becomes active in the treatment plan and active in protecting the effects of the treatment. These restrictions are not tough in themselves but they add up to a lot of details to be controlled.

The protocol involves a simple principle; Avoid foods and environmental factors to which you know you react, or could easily do so, or which might interfere with the therapy. Avoid such things as:

- * diet supplements unless prescribed or approved by your EPD doctor,
- * medications unless prescribed or approved by your EPD doctor,
- * contraceptive pills,
- * dental treatments and all anaesthetics,
- * extreme heat and exercise,
- * pets and animals exposure,
- * pollens,
- * dust,

- * mould,
- * newspapers,
- * paints,

chemicals (air fresheners, scents, perfume, nail polish, smoke, photocopiers, toothpaste, deodorant, ointments, lotions, makeup, bath soap, shampoo, dish soap, laundry soap, stress, drugs, medications).

Some of the restrictions are aimed at avoiding bodily stress for a period of time around the treatment, and include such things as: don't run a marathon, don't use a sauna or other heat to which your body is not acclimatized. Restrictions are also placed on things which may produce a negative result while the EPD treatment is taking effect. Included is a period of avoidance of: dust, dust mites, tobacco smoke, perfume, chemicals, body lotions and preparations, allergenic foods, certain medicines, caffeine, sexual activity, large doses of inhalant allergens, and pets. Note that this is not a complete list, and each patient will be advised of the necessary restrictions based on his or her particular case. For anyone who is really in need of major relief, the rules are a trade-off against the chance to obtain a more normal lifestyle.