

Non-conventional approaches to allergy testing: reconciling patient autonomy with medical practitioners' concerns

It may be difficult for patients to distinguish current concepts of immune function from other, non-conventional explanations of illness

Each year, as many as 50%–70% of adults and children with allergic disease consult alternative practitioners.^{1–3} Some will undergo unproven diagnostic “allergy testing” as used by some alternative (and some conventionally trained) medical practitioners. The potential for adverse outcomes from using unproven *diagnostic* techniques is not only insidious but also potentially more serious than the more commonly debated issues surrounding costs,¹ or the risks and benefits of alternative therapies such as naturopathy, chiropractic, acupuncture, homoeopathy or so-called “allergy elimination therapy”.^{4,5} Particular concerns arise when “positive test results” are followed by advice to restrict diet, a practice that our combined clinical experience tells us occurs not infrequently, regardless of the presenting problem — even in cases of asthma, allergic rhinitis or recurrent infection in which food allergy is not considered to play a pathogenic role. Such advice may unnecessarily delay more appropriate therapy and sometimes impair nutrition and growth.⁶

It is not difficult to understand why patients with allergic disease seek help where they can find it. Most people affected by allergic disease are young adults, or parents of young children with eczema, food allergy or allergic respiratory disease — groups that may find concepts of chronicity, and palliation rather than cure, unattractive. Parents of young children may be attracted to non-invasive (“no needles”) allergy testing. Furthermore, the field of allergy and immunology is a non-organ-based specialty, making it difficult for some patients to distinguish current concepts of immune function (or dysfunction) from other, non-conventional explanations of illness. Blurring the meaning of “allergy” to refer to

any perceived response to an environmental agent, and use of the term “impaired immunity” interchangeably with “fatigue” (in the media as well as among some alternative practitioners), is conducive to blending concepts of immunology, neurology and spirituality to explain the pathogenesis of disease by some non-conventional philosophies.⁷ Factors that may contribute to the uptake of unproven diagnostic and therapeutic techniques include congruence with patients’ own philosophies about the pathogenesis of some disorders, a desire for autonomy, long waiting lists for specialty allergy services (and the lack of any publicly-funded clinics in some states, such as Tasmania and Queensland), advice from friends and family, internet-derived information (and misinformation) and uncritical media attention.^{1–3}

Some of the non-conventional “allergy” tests in current use arose in the early 20th century, when allergy practice was essentially empirical.⁸ At that time, without mechanistic explanations or reliable tests to confirm an immune origin, disorders with a similar phenotype (eg, allergic and non-allergic urticaria) and some non-specific symptoms (eg, migraines, fatigue) were attributed to allergy, if skin tests were positive, or to “allergic toxæmia”, if results were negative.⁹ Cytotoxic food testing (“Bryans’ test”, and the ALCAT variant — whereby a patient’s leucocyte morphology is assessed after incubation with food extracts) was one, now considered unconventional, technique to arise from a search for more “reliable” tests to explain these phenomena.⁹ This test continues to be used today, despite evidence that results are not reproducible, are different when duplicate samples are analysed blindly, do not correlate with those from conventional testing, and “diagnose”

food hypersensitivity in people with conditions in which food allergy is not considered to play a pathogenic role.¹⁰

In the meantime, modern allergy practice relies on understanding the biological mechanisms underlying allergic disorders and the correlation of symptoms with standardised tests to detect allergen-specific IgE.¹¹ Reliable allergy testing increases diagnostic accuracy and facilitates the identification of avoidable inhaled or ingested triggers.¹² Advances in scientific understanding have also facilitated the development of medications to block specific inflammatory pathways and novel approaches to immunotherapy.¹¹

By contrast, many non-conventional diagnostic techniques are used without published evidence of clinical utility, and those subjected to formal evaluation have produced uniformly negative results. For example, in a blinded study, iridology practitioners were unable to distinguish healthy from diseased individuals and gave different diagnoses using iris photographs from the same patients taken minutes apart.¹³ Furthermore, the theoretical basis for iridology — that disease is reflected in iris patterns — is undermined by the use of iris patterns as biometric identification markers because they are considered to be unchanging and unique to individuals, differing even between genetically identical twins. Kinesiology (muscle testing) has been shown, in controlled studies, to be no more accurate than guessing.¹⁴ Vega (electrodiagnostic) testing, whereby skin electrical resistance is measured with food extracts present in the same circuit, was unable to distinguish between healthy and allergic individuals, or between control and allergen extracts, and yielded results that did not correlate with conventional test results.¹⁵ Rigorous study of other non-conventional methods such as IgG food antibody testing, food immune complexes and sublingual provocation/neutralisation have provided similarly negative results. (These and other techniques are reviewed in more detail at <<http://www.allergy.org.au/pospapers/unorthodox.htm>>.)

In light of the evidence, how can we, as doctors, best serve our patients? First, we need to understand our patients' belief systems and understand conventional and non-conventional approaches to diagnosis and treatment of allergies. Second, when assessing polysymptomatic patients with normal clinical and laboratory findings, we need to resist the temptation to label medically unexplained illness as "allergic disease", and should question an allergy diagnosis made by the patient or based on unproven diagnostic techniques. By doing so, we may be able to help our patients to direct their efforts into more productive areas, and minimise unnecessary expenditure resulting from the use of unproven diagnostic techniques. We may also then be able to reconcile concepts of patient autonomy with the medical principle

of *primum non nocere* (first, do no harm) and reduce the possibility that patients may inadvertently harm themselves or their children by pursuing unproven diagnostic techniques.

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