BSEM Training Day 7 - "Spotlight on Inflammation"
Inflammation underlying acute & chronic illness: Immunological & other Mechanisms, Diagnosis & Treatment Options.

Inflammation: Assessment, Causation and Treatment.

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EM Chapter 7: Inflammation symptoms: pain, swelling, heat, redness and loss of function

Not all symptoms arise from inflammation, but inflammation can cause almost any symptom. Inflammation is characterised by:

- pain,
- swelling (with the potential for friction and mechanical irritation),
- heat,
- redness (due to increased blood flow) and
- loss of function (cell defence response).

Inflammation for healing and repair

Inflammation is an essential part of survival. We cannot live without damaging our bodies and inflammation is part of healing and repair.

For example the gut lining turns over every 3 days

https://dmd.aspetjournals.org/content/42/12/2016

If inflammation is inhibited by NSAIs then so is healing and repair. This may be the mechanism by which NSAIs and steroids are damaging to the gut

Healing and repair occurs during sleep – it may be painful – this may explain why inflammatory arthritis pain (eg PMR) is worse on rising and improves as the day progresses.

Inflammation occurs where and when the immune system, our standing army, is active

This is good for fighting infection and for healing and repair……..

……..but bad when switched on as in allergy and auto-immunity. This is civil war!

Acquired immunity is a ”learning “ mechanism

The immune system is switched on when it perceives a foreigner which has the potential to do harm. There is an inertia in the system, so it takes time to switch on. In the case of an acute infection, say measles, this inertia allows the measles virus to get ahead of the game so measles illness results. Then this virus is killed and cleared away by inflammation. The immune system “learns”, so at a subsequent exposure to measles virus, the inertia has gone, and the virus immediately killed. We call this immunity and it is highly desirable.

Precisely the same principles which allow the immune system to deal with acute infection ALSO apply to drive chronic inflammation

This ability of the immune system to “learn” drives allergy and auto-immunity – as it “learns” the incitants below are damaging it “learns” to switch on inflammation. If the incitant persists then inflammation is switched on constantly and becomes chronic. My guess is that in order of importance the immune system is switched on by

- Metals and adjuvants in vaccines
- Microbes from the fermenting gut (high carbohydrate diets)
- Metals (dental amalgams, gold, nickel, titanium etc)
- Chemicals (pesticides, VOCs)
- Environmental moulds or yeast,
- Surgical materials: silicones, metals, stitching materials
- Electromagnetic radiation eg 5G
- Other such

In small amounts the immune system perceives no danger and can ignore. But if present in larger amounts there may be tissue damage and inflammation is switched on to “kill” and clear the foreigner

BUT metals, silicones and many chemicals are tough molecules that cannot be broken down and cleared away.

Microbes may be persistently present despite the body’s best attempts to get rid.

5G may be unavoidable

So the immune system goes on fighting with chronic inflammation.

This may switch on allergy to foods, biologicals, chemicals, microbes, radiation…….

…….AND SELF – this is auto-immunity and this is highly undesirable. It is civil war!

Diagnosing inflammation
History, symptoms and signs give the best clues

Local inflammation : PAIN SWELLING HEAT REDNESS LOSS OF FUNCTION

Thermography is a very useful and sensitive tool for identifying local areas of inflammation in the body. Essentially it takes a “heat” photograph and of course inflammation is characterised by heat. I love this technique because it involves no radiation, and so scans can be regularly repeated to check clinical progress. Heat photographs are as individual as light photographs so changes are easy to see. I look forward to a DIY phone app that anyone can use – hurry up you boffins! I need one to help me diagnose and locate “gravel” in my lame horse!

General inflammation: fatigue (physical and mental), malaise, fever, illness behaviour, lymphadenopathy, rash, loss of appetite etc

Inflammatory marker	Usual ref range	Ideal	Units
Fasting insulin	2.6-24.9	1.0-5.0	uIU/ml
Glycosylated haemoglobin	4.8-5.6 29 -38	4. -5.2 26-33	% mmol/mol
C reactive protein	0-3	0-2	mg/L
ESR:	**0-22 for men** **0-29 for women**	**<5mm/hr**	mm/h
Plasma viscosity	1.5-1.7	1.5-1.65	mPA
Ferritin	30-400	Females (30-100) Males (30-150)	Ng/ml
Red Blood Cell Width (RDW)	12.3-15.4	11.7-15	%
WCC	4-11	4-6	x 10 to the power 9/l

Laboratory tests for inflammation

Faecal calprotectin. This is typically raised in inflammatory bowel disease. I like to see levels below 15. 15-50 may indicate abnormal microbiome (ie upper fermenting gut, but may not!) More than 50 suggests pathology and further Ix needed

Immunological tests eg lab4more Lymphocyte Typing (which tells us if the immune system is over-active or under-active)

Be mindful that for low grade inflammation there may be no positive test. Do not trust the tests!

This is a particular problem for PWME [‘People With ME’] whose illness is often infection driven but conventional tests lack the sensitivity and specificity to diagnose. Shamefully they are told by doctors, who should know better, that there is nothing wrong because all the tests are normal.

ALSO “normal ranges” for inflammatory markers have been changed. When I qualified as a medical student, an ESR was considered normal up to 10mmm/hour. Now normal is up to 20mm/hr and some labs 30! I like to see it running below 5.

AND it may be that the immune system is so exhausted by poor energy delivery mechanisms, lack of raw materials or unremitting calls for action (infection, allergy toxicity) that it can no longer mount an effective action and the tests go negative. Lymphocyte Typing will show this as a hypo-reactive immune system.

EM Chapter 36: tools of the trade to switch off chronic inflammation– treating infection, allergy and autoimmunity. Reprogramming the immune system.

The principles of treatment are:

- Improve energy delivery mechanisms for healing and repair
- identify the cause and remove it (turn off the gas to the cooker)
- extinguish the inflammatory fire (smother the flames)
- but if that is not enough, reprogramme the immune system (learn not to make the same mistake again! Not easy- old habits die hard)

All diagnosis starts with hypothesis - the final diagnosis can only be made retrospectively following successful response to treatment

This means that response to treatment is part of diagnosis

With Ecological Medicine the emphasis is on restoring normal body function to allow the body to heal itself – to do such it requires:

Good energy delivery mechanisms

The raw materials

Time (sleep)

The correct drive – mental (good challenges), emotional (love, a complex social life, ideally a puppy dog!) and physical (exercise)

ALL THESE ARE ADDRESSED BY GROUNDHOG INTERVENTIONS

What are Groundhog regimes?

So called after the film "Groundhog Day" where a time loop constantly brings our hero back to square one!

There are 3 levels of Groundhog

Groundhog basic – what we should all be doing, from birth to death, all the time, to live to our full potential

Groundhog Acute – what we should all be doing at the FIRST symptom or sign of an acute infection.

Groundhog Chronic – what we should all do with any pathology, and increasingly so with age. *"Youth is wasted on the young"* Oscar Wilde (1854-1900

https://www.drmyhill.co.uk/wiki/Groundhog_BASIC_%E2%80%93_what_we_should_all_be_doing_all_the_time

https://www.drmyhill.co.uk/wiki/Groundhog_ACUTE_-_put_in_place_at_the_first_sign_of_any_infection

https://www.drmyhill.co.uk/wiki/Groundhog_CHRONIC_%E2%80%93_the_starting_point_to_treat_any_chronic_infection_AND_to_live_to_our_full_potential

Your patient has pathology. Apply Groundhog Chronic

WHAT to do	WHY	My patients always ask me what I do. I am no paragon of virtue…..I may have to become one eventually!
The Paleo-Ketogenic diet – high fat, high fibre, very low carb. **Probiotic foods like kefir and sauerkraut** **No dairy or grains.** **2 meals a day. No snacking.** **Source the best quality foods you can find and afford – organic is a great start!**	See our books "Prevent and Cure Diabetes – delicious diets not dangerous drugs" for the WHY and "The PK cookbook – getting the best of both worlds" for the HOW .	Yes. I do the PK diet 95% of the time. Glass of cider at weekends! Other liberties if eating out or socialising. But my friends are all becoming PK adapted too!
Eat daily food within a 10 hour window of time…..	…so 14 hours a day when stomach is empty – this keeps the stomach acid and so decreases the chances of microbes invading. Maintains ketosis.	Nearly there……. breakfast at 8am, supper 6.30pm
Consider episodic fasting one day a week	This gives the gut a lovely rest and a chance to heal and repair	I do this most weeks. Friday is fast day. Once a month 2 day fast. Once a year week fast
A basic package of nutritional supplements – multi-vitamins, multi-minerals and vitamin D	A good multivitamin and sunshine salt 1 tspn daily with food. A dessert spoon of hemp oil	Yes
Glutathione 250mgs daily **Iodine 25 mgs weekly**	We live in such a toxic world we are inevitably exposed. Glutathione and iodine are helpful detox molecules (some people do not tolerate iodine in high doses)	Yes
Vitamin C to 90% of bowel tolerance, including 5 grams last thing at night. Remember this will change with age, diet and circumstance	With age, influenza becomes a major killer. With Groundhog you need never even get it!	Yes. I currently need 8 grams in 24 hours. BUT I never get colds or influenza that last more than 24 hours
Lugol's iodine 15% 2 drops daily in water.	Swill round the mouth and swallow last thing at night	Yes
Make sure your First Aid box is stocked	So, you have all your ammo to hand to hit new symptoms hard and fast	Yes – even when I go away, I take this – often to treat sickly others!
Sleep 8-9 hours between 10pm and 7am **Regular power nap in the day**	More in winter less in summer Good sleep is as vital as good diet	Yes
Exercise within limits. By this I mean you should feel fully recovered next day. **If well enough, once a week push those limits, so you get your pulse up to 120 beats per min and all your muscles ache.** **It is never too late to start!**	No pain no gain. Muscle loss is part of ageing - exercise slows this right down Helps to physically dislodge microbes from their hiding places. I suspect massage works similarly	Yes. Thankfully I am one of those who can and who enjoys exercise
Take supplements for the raw materials for connective tissue such as glucosamine. **Bone broth is the best!**	With age we become less good at healing and repair	Yes
Herbs, spices and fungi in cooking	Use your favourite herbs, spices and fungi in cooking and food, and lots of them!	Yes. Because I love food!
Consider herbs to improve the defences – see chapter 13	Astragalus, cordyceps and rhodiola	Sometimes when in stock and I remember

Address energy delivery mechanisms as below	See our book “Diagnosing and treating Chronic fatigue syndrome and myalgic encephalitis: its mitochondria not hypochondria”	Yes Craig– I’ve got the book!
Take the mitochondrial package of supplements daily vis: Co Q 10 100gs, niacinamide slow release 1500mgs, acetyl L carnitine 500mgs. D ribose 5-10 grams at night if you have really overdone things	With age fatigue becomes an increasing issue because our mitochondrial engines start to slow. The ageing process is determined by mitochondria. Look after them!	Yes I don’t take carnitine because I eat meat and my digestion is good
Mitochondria may be going slow because of toxins. Consider tests of toxic load to see if you need to do any detox	A good allrounder is Genova urine screen with DMSA 15mgs per kg of body weight. You can get this test through https://naturalhealthworldwide.com/	This is the only test I have ever done on myself! It showed background levels of toxic minerals
Check your living space for electromagnetic pollution	You can hire a detection meter from Healthy house https://www.healthy-house.co.uk/electro/meters-and-monitors	Yes. The cordless phone has gone! I never hold a mobile phone to my ear – I use the speaker Turn wifi off at night
Review any prescription medication – they are all potential toxins! The need for drugs is likely to be symptomatic of failure to apply Groundhog	Ask yourself why you are taking drugs? See our book “Sustainable Medicine”. Once Groundhog is in place many drugs can be stopped. Taking prescription drugs is the fourth commonest cause of death in Westerners.	I never take symptom supressing medication. This has allowed full and now pain-free recovery from three broken necks (horses again) and other fractures.
Consider tests of adrenal and thyroid function since these glands fatigue with age and chronic infection	Thyroid bloods tests and adrenal saliva tests available through https://naturalhealthworldwide.com/ Core temperatures are helpful for fine tuning adrenal and thyroid function with glandulars. See Chapter 30	I find glandulars very helpful and currently take thyroid glandular 60mgs in the morning and 30mgs midday Adrenal glandular 500mgs once daily

Heat and light	Always keep warm. Sunbathe at every opportunity. Holidays in warm climates with sunbathing and swimming are excellent for killing infections and detoxing	I am a pyromaniac! My kitchen is lovely and warm with a wood fired range. I work in my conservatory with natural light. I sunbathe as often as wet Wales permits Do not forget hyperthermia and light as a good treatment for chronic infections - see chapter 11
Use your brain	Foresight: Avoid risky actions like kissing*, unprotected sex Caution: Avoid vaccinations. Chose travel destinations with care. Circumspection: Do not symptom suppress with drugs, treat breaches of the skin seriously.	I have to say that with age this is much less of an issue! No vaccinations. No foreign travel except to the continent to see my daughter and to do lectures.

	WHAT TO DO IN ORDER OF IMPORTANCE	WHY
1	MUST start with the PK diet Ensure you are in ketosis using a ketone breath meter	If you are eating carbohydrates you will have a fermenting gut. Taking supplements will feed the fermenting gut!
2	Then take vitamin C, at least 5 grams daily, probably more, little and often through the day	This helps kill upper gut fermenters, facilitates the absorption of minerals, protects you from infection, helps detox and improves anti-oxidant status
3	Then take the Basic Package of supplements	Now you will absorb these well
4	Then take the mitochondrial package of supplements	Now you will absorb these well
5	Then balance up the adrenal gear box and thyroid accelerator pedals	These glands work by kicking mitochondria into action. You need mitochondria in a fit state to respond
6	If you suspect a toxicity problem	Put in place detox regimes
7	If you suspect an immunological hole in the energy bucket	Consider tests to identify what?
8	If you suspect an emotional hole in the energy bucket	
	REMEMBER – you must pace throughout so you do not suffer post-exertional malaise	Chronic production of lactic acid inhibits mitochondria and slows recovery
	EXPECT - to have a bumpy ride	All the above may cause short term worsening because of diet, detox and die off reactions. See https://www.drmyhill.co.uk/wiki/Diet,_Detox_and_Die-off_Reactions_-_expect_to_get_worse.
	BE SATISFIED with gentle progress in the right direction	It takes six months for the body to heal and repair and this demands energy too
	IF YOU GET STUCK join a workshop https://drmyhill.co.uk/wiki/Workshops_for_Ecological_Medicine	

There is little point in doing expensive tests until GH Chronic is in place

This is simply because the starting point to treat all chronic inflammations is the same

For many, GH regimes done well is all that is necessary to recover

Precious financial resources are saved for when tests are required when you get stuck

By doing GH regimes you clarify the clinical picture – it may become much more obvious which incitants are the problem

Everyone loves a test to “prove” they are ill BUT curiosity is an expensive hobby!

Tests which are very useful once GH Chronic is in place and you are stuck! Use your clinical acumen to prioritise testing:

Tests for chronic infections: either you can look for

- the actual microbe
- OR you can look to see which part of the immune army is busy and thereby infer what the incitant is
- Or you can look for other markers

Tests for allergy

Tests for toxicity

Tests for chronic infection – viral? Bacterial? Fungal? Which specific test to do?

Armin labs https://www.arminlabs.com/en

offer a Viral Panel and a Bacterial Panel

It is important to look at both antibody responses and cell medicated responses (EliSpot). Armin do both. Contact

Great Plains offer mycotoxin test which may point to fungal infection – this test available through Biolab

OR

Lab4more look at which department of the immune system is busy – is it busy or exhausted in response to a virus? Bacteria? Cancer? Autoimmune? Allergic? This test available through Biolab

Tests for allergies to foods and inhalants

I rarely ask for these tests. Good detective work is the best test and this is much easier once the patient is well established on Groundhog regimes.

If inhalant sensitivities are suspected then the best test is a holiday

Eg How do you feel in a mould free environment and/or away from home? Moulds need at least 40% humidity to survive ergo: hot dry, cold dry, above 3,000ft, on the coast. Ditto house dust mite.

Pollens are seasonal.

Tests for VOCs and pesticides, heavy metals

AGAIN rely on the history for clues

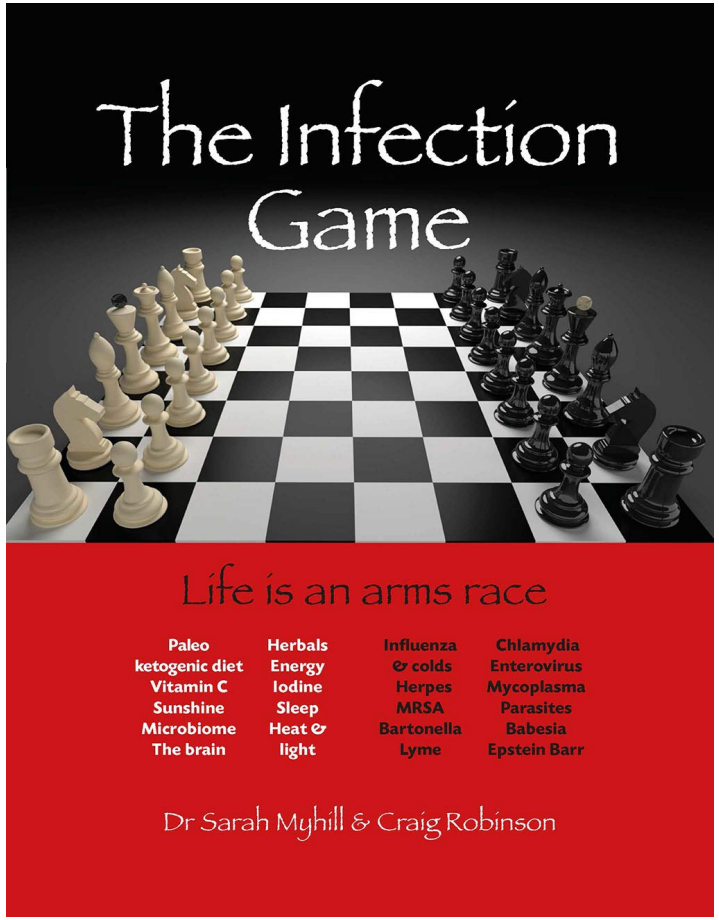
VOCs and pesticides https://www.biolab.co.uk/index.php/cmsid__biolab_test/Toxic_Organic_Chemical_Exposure_Profile

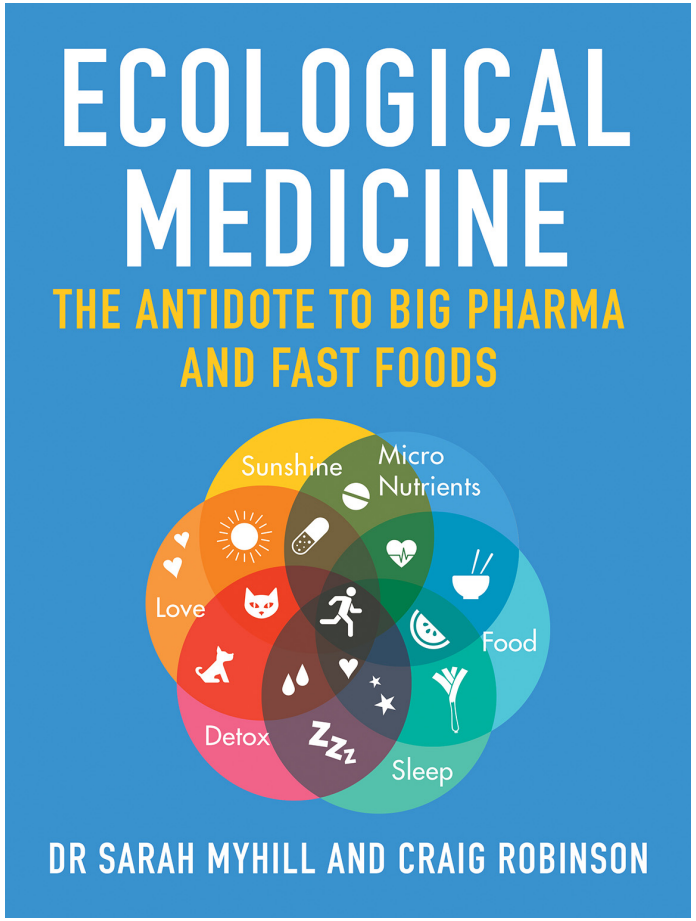
Toxic metals – this must be done following a dose of DMSA or you risk false negative results. See https://www.drmyhill.co.uk/wiki/Toxic_elements_in_urine_following_DMSA

https://www.biolab.co.uk/index.php/cmsid__biolab_test/Toxic_elements_screen_-urine

Allergy to metals needs a MELISA test https://melisa.org/

Having identified the incitant, treat it! Chronic infection: See “The Infection Game”
Chronic toxicity: see detox mechanisms in “Ecological Medicine”





Extinguish the inflammatory fire (smother the flames) Inflammation seems to have a momentum of its own

AGAIN review Groundhog interventions

Vitamin C to bowel tolerance (this is one of yy favourite multitasking tools!)

Vitamin D - up to 10,000iu there has NEVER been any problem or side effects. Some benefit from up to 100,000iu daily BUT serum calcium must be monitored

High dose vit B12 by injection – up to 5mgs daily

Low dose naltrexone

Boron – up to 20mgs is completely safe

Herbals

Nothing boring about boron

https://pubmed.ncbi.nlm.nih.gov/26770156/

The trace mineral boron is a micronutrient with diverse and vitally important roles in metabolism that render it necessary for plant, animal, and human health, and as recent research suggests, possibly for the evolution of life on Earth. As the current article shows, boron has been proven to be an important trace mineral because it

(1) is essential for the growth and maintenance of bone;

(2) greatly improves wound healing;

(3) beneficially impacts the body's use of estrogen, testosterone, and vitamin D;

(4) boosts magnesium absorption;

5) reduces levels of inflammatory biomarkers, such as high-sensitivity C-reactive protein (hs-CRP) and tumor necrosis factor α (TNF-α)

(6) raises levels of antioxidant enzymes, such as superoxide dismutase (SOD), catalase, and glutathione peroxidase;

(7) protects against pesticide-induced oxidative stress and heavy-metal toxicity;

(8) improves the brains electrical activity, cognitive performance, and short-term memory for elders;

(9) influences the formation and activity of key biomolecules, such as S-adenosyl methionine (SAM-e) and nicotinamide adenine dinucleotide (NAD(+));

(10) has demonstrated preventive and therapeutic effects in a number of cancers, such as prostate, cervical, and lung cancers, and multiple and non-Hodgkin's lymphoma; and

(11) may help ameliorate the adverse effects of traditional chemotherapeutic agents. In none of the numerous studies conducted to date, however, do boron's beneficial effects appear at intakes > 3 mg/d.

No estimated average requirements (EARs) or dietary reference intakes (DRIs) have been set for boron-only an upper intake level (UL) of 20 mg/d for individuals aged ≥ 18 y. The absence of studies showing harm in conjunction with the substantial number of articles showing benefits support the consideration of boron supplementation of 3 mg/d for any individual who is consuming a diet lacking in fruits and vegetables or who is at risk for or has osteopenia; osteoporosis; osteoarthritis (OA); or breast, prostate, or lung cancer.

BUT if the above is not enough, reprogramme the immune system (learn not to make the same mistake again! Not easy- old habits die hard)

I started off my clinical life using neutralisation – but it was very time consuming and hard work!

THEN I moved on to EPD – this does work well for food and inhalant allergies

NOW I am moving on to micro-immunotherapy because this works well for chronic infections. It can also be used for clinical pictures where the incitant is uncertain. The logistics are simple – sublingual capsules which can be easily posted to patients

See https://www.drmyhill.co.uk/wiki/Reprogram_the_immune_system_with_micro-immunotherapy

Join our group spear-headed by Dr Franziska Meuschel and Dr Christian Sohmen. A library of information at

Introduction to Micro-immunotherapy

A powerful immune system switch on is vaccination – avoid!

One in twenty Westerners now has an autoimmune condition (which amounts to a self-destructive civil war). In fact in the USA, this figure rises to one in fifteen – Benaroya Research – 'Autoimmune disease' – conclude that 5 million American men and 18 million American women have auto-immune disease - www.benaroyaresearch.org/what-is-bri/disease-information/autoimmune-diseases

The problems of vaccination (from Ecological medicine Chapter 51

One in twenty Westerners now has an autoimmune condition (which amounts to a self-destructive civil war). In fact in the USA, this figure rises to one in fifteen – Benaroya Research – 'Autoimmune disease' – conclude that 5 million American men and 18 million American women have auto-immune disease - www.benaroyaresearch.org/what-is-bri/disease-information/autoimmune-diseases

Allergy UK estimates that 44% of British adults have at least one allergy (when the immune system attacks the benign and harmless outsider). Both present with symptoms of inflammation (chapter 7). See Allergy UK's paper 'Allergy Prevalence' - https://www.allergyuk.org/assets/000/001/369/Stats_for_Website_original.pdf?1505209830

Having one allergy and/or an autoimmune condition greatly increases the risk of others. Furthermore, both these conditions run in families. Since the commonest triggers for both are acute infection, vaccination and silicone – you must avoid! Allergy and autoimmunity are much easier to switch on than to switch off, and so awareness and prevention is vital.

Vaccinations

It is a fact, little short of astonishing, that the effectiveness of vaccination is unproven.

When vaccinations were introduced rates of infectious disease were already falling thanks to Victorian engineers, better nutrition, warmer homes and good hygiene. Vaccines had no impact on this rate of decline.

Vaccines may increase death rates in children.

Furthermore, febrile illnesses of childhood protect against later disease including brain tumours and autoimmunity.

Vaccination is, in theory, a great idea. This has not translated into practical reality.

The following slides are from “Green Mother” by Yours Truly - to be published 2021

Study	Quote	Reference
The introduction of Diphtheria-Tetanus-Pertussis and Oral Polio Vaccine among young infants in an urban African community: a natural experiment	*Between 3 and 5 months of age, children who received DTP and OPV early had 5-fold higher mortality than still unvaccinated children.*	The Lancet 2017 DOI;https://doi.org/10.1016/j.ebiom.2017.01.041
Pilot comparative study on the health of vaccinated and unvaccinated 6- to 12-year-old U.S. children.	*….vaccination was associated with a 6.6 fold increased odds of neurodevelopmental delay….and higher rates of allergy*	Mawson, AR, Ray, BD, Bhuiyan, AR, et al J Transl Sci 2017; 3: 1–12.
Analysis of health outcomes in vaccinated and unvaccinated children: Developmental delays, asthma, ear infections and gastrointestinal disorders	*The medical community does in general acknowledge that vaccination is not without health risks, including death.* *Slightly higher orders of risk were also observed for all four health conditions [developmental delays x2, asthma x4, ear infections x2 and gastrointestinal disorders] when time permitted for a diagnosis was extended from ⩾3 years of age to ⩾5 years of age.* The more vaccines received the greater the risk. The longer the children followed up for the more the risk increased	Sage open Medicine https://doi.org/10.1177/2050312120925344

Infant mortality rates regressed against number of vaccine doses routinely given: Is there a biochemical or synergistic toxicity?	*The US childhood immunization schedule specifies 26 vaccine doses for infants aged less than 1 year—the most in the world—yet 33 nations have lower Infant Mortality Rates* *There is a high statistically significant correlation between increasing number of vaccine doses and increasing infant mortality rates, …….. statistically significant differences in mean IMRs were found between nations giving 12–14 vaccine doses and those giving 21–23, and 24–26 doses.*	Hum Exp Toxicol. 2011 Sep; 30(9): 1420–1428. doi: 10.1177/0960327111407644
Diphtheria-Pertussis-Tetanus (DPT) Immunization: A Potential Cause of the Sudden Infant Death Syndrome (SIDS)	*…two-thirds of babies who had died from SIDS had been vaccinated against DPT (diphtheria–pertussis–tetanus toxoid) prior to death. Of these, 6.5% died within 12 hours of vaccination; 13% within 24 hours; 26% within 3 days; and 37%, 61%, and 70% within 1, 2, and 3 weeks, respectively.*	Torch American Academy of Neurology, 34th Annual Meeting, Apr 25-May 1, 1982. Neurology 32(4): pt.2 Also see cot death chapter 4
Diphtheria-tetanus-pertussis immunization and sudden infant death syndrome.	*Walker found the SIDS mortality rate in the period zero to three days following DPT to be 7.3 times that in the period beginning 30 days after immunization."*	Walker AM, Jick H, Perera DR, Thompson RS, Knauss TA. Am J Public Health 1987; 77: 945–951
Confounding in studies of adverse reactions to vaccines	*Babies died at a rate nearly eight times greater than normal within 3 days after getting a DPT vaccination.*	Fine PE, Chen RT. . Am J Epidemiol 1992; 136: 121–135
Infant death rates fell markedly during the Covid 19 pandemic	*Starting in early March, expected deaths [in infants] began a sharp decline, from an expected level of around 700 deaths per week to well under 500 by mid-April and throughout May…… the May 15 issue of the CDC Morbidity and Mortality Weekly Report (MMWR), …..reported a sharp decline in provider orders for vaccines as well as a decline in pediatric vaccine doses administered. These declines began in early March, around the time infant deaths began declining.*	https://www.cohealthchoice.org/wp-content/uploads/2020/06/Lessons-from-the-Lockdown-vF-6-17-20.pdf

*The Introduction of Diphtheria-Tetanus-Pertussis and Oral Polio Vaccine Among Young Infants in an Urban African Community: A Natural Experiment Søren Wengel Mogensen a,1 , Andreas Andersen b,1 , Amabelia Rodrigues a , Christine S Benn b,c , Peter Aaby a,b, **

- When DTP and OPV were introduced in Guinea-Bissau in 1981, allocation by birthday resulted in a natural experiment of being vaccinated early or late.
- •Between 3 and 5 months of age, children who received DTP and OPV early had 5-fold higher mortality than still unvaccinated children.

https://www.thelancet.com/action/showPdf?pii=S2352-3964%2817%2930046-4

Febrile (fever producing) illness in children (measles, mumps, rubella, chickenpox, pertussis, scarlet-fever and others) protects from subsequent malignancy. Bring back those chicken pox parties!!

Boyhood, like measles, is one of those complaints which a man should catch young and have done with, for when it comes in middle life it is apt to be serious.

P.G Wodehouse, English author and humourist, 15 October 1881 – 14 February 1975

(From "Green Mother" - to be published 2021)

Which illness	Protective against	Quote	Reference
Any febrile childhood infectious disease (FICD)	All cancer	*…showed a significant association between FICD and the risk of developing cancer. The number of FICD decreased the cancer risk, in particular for non-breast cancers*	Medical Hypotheses Volume 51, Issue 4, October 1998, Pages 315-320
Any febrile childhood infectious disease	meningioma, glioma, melanoma and others	*Exposures to febrile infectious childhood diseases were associated with subsequently reduced risks for melanoma, ovary, and multiple cancers combined*	Cancer Detection and Prevention Volume 30, Issue 1, 2006, Pages 83-93
Mumps	Ovarian cancer	*GeT QUOTE*	Cancer Causes Control. 2010 Aug; 21(8): 1193–1201.
Chickenpox	Brain tumour (glioma)	*a positive history of chickenpox was associated with a 21% lower glioma risk*	Cancer Medicine volume5, Issue6 June 2016 Pages 1352-1358
Any febrile childhood infectious disease	Hodgkin lymphoma	*infections by most common childhood pathogens may protect against Hodgkin lymphoma (HL) or, at least, be correlated with some other early exposure, which may lower the risk of Hodgkin lymphoma (HL) in adulthood.*	Leuk Research. 2006 Aug;30(8):917-22. doi:10.1016/j.leukres.2005.11.020. Epub 2006 Jan 6.
Measles	Non-Hodgkin lymphoma	*In addition, our study shows that measles may provide a protective effect against non-Hodgkin lymphoma (NHL).*	ditto

Febrile illness early in life	Non-Hodgkin lymphoma	*delayed infection could explain the increasing non-Hodgkin lymphoma (NHL) trends, through an impairment of the Th1/Th2 lymphocyte patterns.*	J Epidemiol Community Health. 2000 Dec; 54(12): 907–911. doi: 10.1136/jech.54.12.907
	Asthma	*The model of delayed infection has been proposed also to explain increasing prevalence rates of asthma."*	ditto
Febrile illness early in life	Acute lymphoblastic leukaemia	*reduced exposure to infection in the first few months of life increases the risk of developing acute lymphoblastic leukaemia.*	BMJ 2005; 330 doi: https://doi.org/10.1136/bmj.38428.521042.8F
Measles mumps and other febrile illnesses	Arteriosclerosis: cardiovascular disease and stroke	*Measles and mumps, especially in case of both infections, were associated with lower risks of mortality from atherosclerotic CVD* *A higher number of infections was associated with a lower risk of mortality from cardiovascular disease.*	The Japan collaborative cohort study DOI: htpp://doi.org/10.1016/j.atherosclerosis.2015.06.026
	Colon cancer in young people is increasing	*While there is no evidence this could be linked to vaccination or not having febrile diseases, it is perhaps significant the rise started for the generation born in the 1950s, who were the first to participate in the mass vaccination programs beginning in 1953. The rate also rose a lot for those born around 1990, the period when immunisation schedules in the first world sharply expanded and autism and allergy rates took off—autism is strongly associated with bowel issues.*	*JNCI: Journal of the National Cancer Institute*, Volume 109, Issue 8, August 2017, djw322, https://doi.org/10.1093/jnci/djw322

All truth passes through three stages First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident

Arthur Schopenhauer, German philosopher (1788 – 1860)

1. Vaccinations are immunotoxic

- The immune system is intelligent. It will, quite correctly, ignore an injection of dead microbes. Vaccinations only elicit an immune reaction if an immune adjuvant is included. Essentially this is a "wake up" call to the immune system to put it on red alert. The intention of vaccination is for the immune system to react solely to the viral or bacterial antigens contained within the vaccination and so stimulate immunity. But adjuvants may "wake up" the immune system inappropriately with the potential to switch on allergies and/or auto-immunity. Indeed, we know that MMR, Hepatitis B vaccination, influenza, DPT, typhoid and others all switch on allergic reactions such as reactive arthritis, erythema nodosum, urticaria and vasculitis as well as auto-immune disease such as rheumatoid arthritis, systemic lupus erythematosus (SLE) and type 1 diabetes. One observational study of 22 patients with a rheumatic complaint following Hep B vaccination resulted in the following diagnoses:

- *….rheumatoid arthritis for six patients; exacerbation of a previously non-diagnosed systemic lupus erythematosus for two; post-vaccinal arthritis for five; polyarthralgia–myalgia for four; suspected or biopsy-proved vasculitis for three; miscellaneous for two."*

- J. F. Maillefert et al., *Rheumatic disorders developed after hepatitis B vaccination,* https://academic.oup.com/rheumatology/article/38/10/978/1783598/Rheumatic-disorders-developed-after-hepatitis-B

Adjuvants used are toxic in their own right.

Mercury as thiomerosal has been widely used - Lyn Redwood determined that her son had been exposed, through vaccination, to 125 times the Environmental Protection Agency safety limits for mercury. He developed severe pervasive neurodevelopmental disorder. Please see http://www.wikidoc.org/index.php/Lyn_Redwood for a brief introduction to Lyn Redwood and her work, a remarkable woman.

Aluminium is increasingly used instead of mercury but aluminium too is neurotoxic and immuno-toxic being associated with Alzheimer's disease and autism. Professor Chris Exley has suggested a biologically plausible mechanism by which nano-particles of aluminium switch on CD8 and T cell response to drive inflammation in the brain and so dysregulate normal immune tolerance.

Formaldehyde, another known neurotoxin (and indeed a pesticide) may be used. For a useful summary regarding formaldehyde and its neurodegenerative effects:

"This aldehyde is a well-established neurotoxin that affects memory, learning, and behavior. In addition, in several pathological conditions, including Alzheimer's disease, an increase in the expression of formaldehyde-generating enzymes and elevated levels of formaldehyde in brain have been reported."

Ketki Tulpule, Ralf Dringen, Journal of Neurochemistry, 14 July 2013,
http://onlinelibrary.wiley.com/doi/10.1111/jnc.12356/abstract

Squalene, a toxic oil and adjuvant, may switch on auto-immunity. Increasingly virosomes are used which allows viruses to fuse with target cells. This further bypasses the body's natural defence against virus attack and risks inoculation with xenobiotic viruses.

Most vaccinations are administered by injection

- 90% of the immune system is gut associated. Injections by pass the body's natural defences and allows virus and bacteria access to otherwise protected tissues such as the 'central intelligence agency' processing departments of the immune system and of course the brain. This is a computer hackers dream! Injections bypass our normal firewalls and directly access our intelligence systems so that they can be reprogrammed to work for the hacker's virus. This is a biologically plausible explanation for the many neurodegenerative clinical pictures that we see that follow vaccination and, of course, immune disruption.

"Subjects with newly diagnosed anorexia nervosa (AN) were more likely than controls to have had any vaccination in the previous 3 months [hazard ratio (HR) 1.80, 95% confidence interval 1.21-2.68]. Influenza vaccinations during the prior 3, 6, and 12 months were also associated with incident diagnoses of AN, OCD, and an anxiety disorder. Several other associations were also significant with HRs greater than 1.40 (hepatitis A with OCD and AN; hepatitis B with AN; and meningitis with AN and chronic tic disorder)"

- Front Psychiatry.2017 Jan 19;8:3. doi: 10.3389/fpsyt.2017.00003 , https://www.ncbi.nlm.nih.gov/pubmed/28154539 , "Temporal Association of Certain Neuropsychiatric Disorders Following Vaccination of Children and Adolescents: A Pilot Case-Control Study."

Viral vaccines must be “grown” on animal tissues such as mice or monkey cells because they need the host machinery of these animal cells to replicate.

There is potential for viruses or prions already contained within those animal tissues to also be cultured and get into the vaccine. A major concern, well-hidden at the time, was that during the BSE epidemic many vaccines were grown on bovine material with huge potential to spread new variant CJD.

Dr Judy Mikovits discovered that at least 30% of vaccines are contaminated with gamma-retroviruses (such as XMRV, xenotrophic murine leukaemia virus). These viruses are associated with autism, CFS, prostate cancer, Alzheimer’s, Parkinson’s and motor neurone disease. Indeed the FDA confirms that vaccines may be contaminated with foreign proteins and viruses which drive tumour growth:

In some cases the cell lines that are used might be tumorigenic, that is, they form tumors when injected into rodents. Some of these tumor-forming cell lines may contain cancer-causing viruses that are not actively reproducing. Such viruses are hard to detect using standard methods. These latent, or "quiet," viruses pose a potential threat, since they might become active under vaccine manufacturing conditions

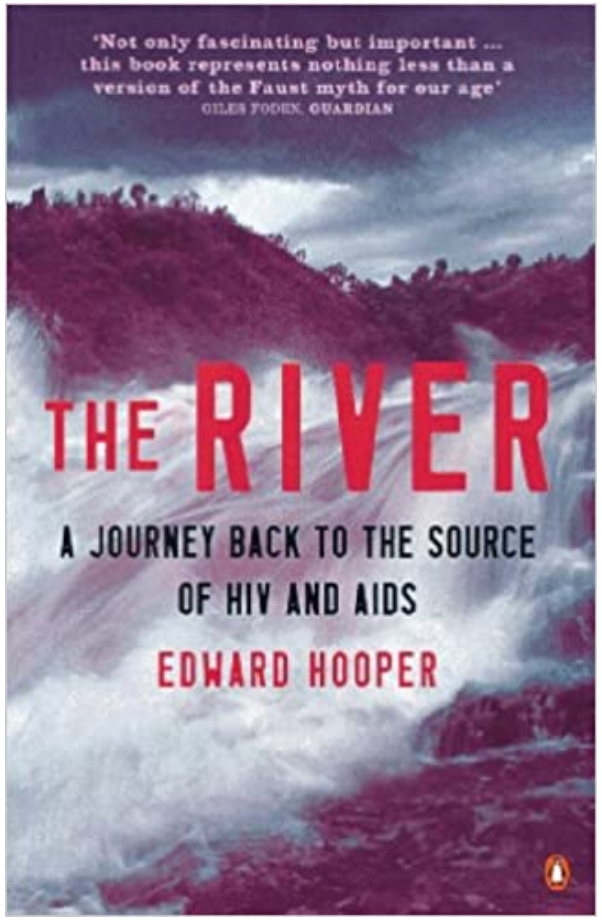
“Investigating Viruses in Cells Used to Make Vaccines; and Evaluating the Potential Threat Posed by Transmission of Viruses to Humans” http://www.fda.gov/BiologicsBloodVaccines/ScienceResearch/BiologicsResearchAreas/ucm127327.htm

HPV vaccines: *“Not only unproven to protect against cervical cancer but Dangerous & Unnecessary). HPV Vaccines cause death, disability and chronic health problems.*

- Researched and compiled by Sarah Kalell, September 2015, in response to a request by The Cancer Association of South Africa

http://sanevax.org/wp-content/uploads/2015/10/CANSA-Reply-September-2015-HPV-Vaccine.pdf

The Polish Doctor Koprowski made CHAT polio vaccine by growing it on chimpanzee kidney culture, killing 350-400 chimps in the process. Many chimps died through the stress of captivity from immunodeficiency disorders. CHAT was fed and injected into millions of Africans between 1957 and 1960. Chimpanzee simian immunodeficiency virus jumped species to become HIV in humans



"One of the great stories of the century….what then is the source of HIV? You should read the book and make up your own mind"

Charles Gilks New Scientist

1,106 pages

182 pages of references

Mitigation strategies Should vaccines be considered eg tetanus or essential foreign travel (but please choose foreign holidays with destinations that do not demand vaccines!) apply the following principles:

1. Insist on single vaccines. This is difficult because, for example, tetanus vaccine is routinely combined with diptheria. You can get single tetanus vaccines through baby jabs http://www.jabs.org.uk/single-vaccines.html
2. Ask for the vaccine to be administered intradermally. This is the logical site – at medical school I was taught and practiced such during my 1980 elective in Kenya and Uganda. The dose of vaccine needed is much smaller. Thanks to new delivery techniques, this is needle free, almost painless and highly reliable https://www.who.int/bulletin/volumes/89/3/10-079426/en/
3. Only administer a vaccine on a day when your PK child is fit and well
4. If there has been any adverse reaction to past vaccine, do not repeat!
5. Vitamin C is highly protective against the malign effects of vaccination. I suggest up to 5 grams of ascorbic acid (approx. 1 gram per 10kgs body weight) given over the 24 hours before and after any vaccination http://orthomolecular.org/library/jom/1999/pdf/1999-v14n03-p137.pdf
6. If the adjuvant used is aluminium, take selenium 300mcgs daily for the month prior and after – both are trivalent cations. If mercury is the adjuvant, take zinc 30mgs. Combine both with glutathione 250mgs. The idea here is that these friendly minerals displace the toxics from binding sites, the toxic stick onto glutathione and are safely excreted.

Intradermal delivery of vaccines: potential benefits and current challenges

JK Hickling [a], KR Jones [a], M Friede [b], D Zehrung [c], D Chen [c] & D Kristensen [c]

Submitted: 05 May 2010 – Revised version received: 01 November 2010 – Accepted: 02 November 2010 – Published online: 05 January 2011.)

Bulletin of the World Health Organization 2011;89:221-226. doi: 10.2471/BLT.10.079426

Most vaccines are delivered by the intramuscular or subcutaneous routes using a needle and syringe; the intradermal route is only widely used for the administration of Bacille Calmette-Guérin and rabies vaccines. However there is renewed interest in intradermal vaccine delivery, driven by the fact that the dermis and epidermis of human skin are rich in antigen-presenting cells, suggesting that delivery of vaccines to these layers, rather than to muscle or subcutaneous tissue, should be more efficient and induce protective immune responses with smaller amounts of vaccine antigen.[1]

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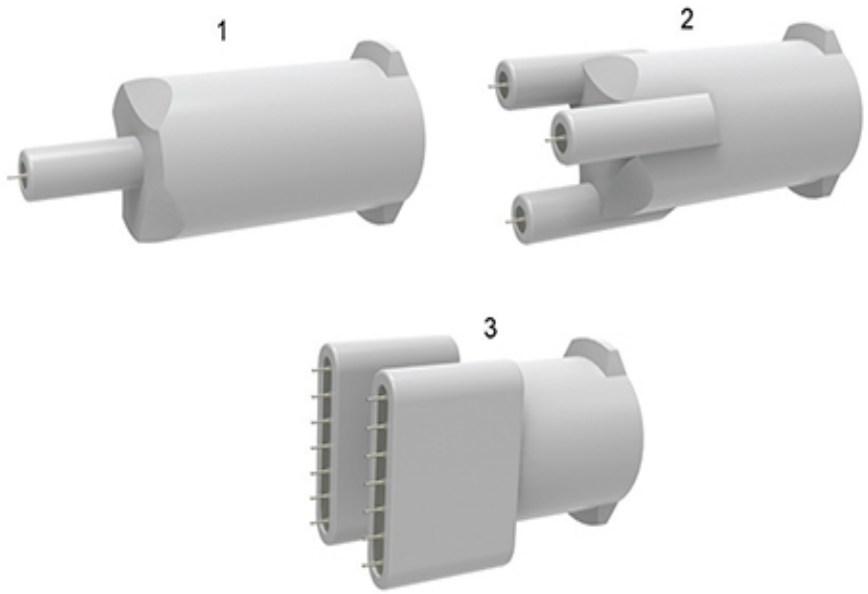
New devices for easier, more reliable intradermal delivery as alternatives to the currently used Mantoux technique are being developed.[2,7]

FIGURE 1



Microneedle configurations are customizable on an application-by-application basis, including: (1) single-projection devices for small dose administration; (2) multiple projections reduce pain while increasing volume; (3) large custom array designed for application-specific administration.

Some of the devices such as disposable-syringe jet injectors are needle-free and could therefore reduce or eliminate needlestick injuries and the costs associated with their treatment, estimated at US$ 535 million per year worldwide.[8]

Other intradermal delivery devices such as microneedle patches are likely to occupy less volume than vials or prefilled syringes, thereby reducing demands on cold-chain capacity

Conclusion: to treat inflammation

Switch it off by

Identifying the incitant

Get rid

Reprogramme the immune system

Avoid switching it on

Treat acute infection with

GH Acute

Avoid vaccination or mitigate