

#### CASE REPORT

To encourage other practitioners to consider submitting a case report for the E-News, we have restructured the format in line with recommendations from July 2014 and have left in the key guides — should you be interested just email <a href="mailto:info@nutri-link.co.uk">info@nutri-link.co.uk</a> We will send you the word doc.

Case reports are professional narratives that outline the diagnosis, treatment, and outcomes of the medical problems of one or more patients. Information from case reports can be shared for medical, scientific, or educational purposes. They provide a framework for early signals of effectiveness adverse events, and cost. Case reports and the systematically collected data from which they are written also provide feedback on clinical practice guidelines.

# Case Report of a 27 year old woman with lifelong eczema, with dramatic improvement on targeted Nutritional Therapy programme.

**Abstract.** Summarise the following information if relevant: (1) Rationale for this case report, (2) Presenting concerns (eg, chief complaints or symptoms, diagnoses), (3) Interventions (eg, diagnostic, preventive, prognostic, therapeutic exchange), (3) Outcomes, and (4) Main lesson(s) from this case report.

This case explores a nutritional focused approach to the marked improvement of a case of lifelong eczema in a 27 year old, first generation British Chinese woman, Miss N.N.

#### Eczema

Eczema is also known as dermatitis, and is a dry skin condition. It is a highly individual condition which varies from person to person and comes in many different forms. It is not contagious. In mild cases of eczema, the skin is dry, scaly, red and itchy. In more severe cases there may be weeping, crusting and bleeding. Constant scratching causes the skin to split and bleed and also leaves it open to infection.

Eczema affects people of all ages but is primarily seen in children. Those who "grow out" of their eczema during early childhood may see it recur again in later life.

In the UK, one in five children and one in twelve adults have eczema while eczema and contact dermatitis account for 84-90% of occupational skin disease.<sup>1</sup>

Atopic eczema is a genetic condition based on the interaction between a number of genes and environmental factors. In most cases, there will be a family history of either eczema or one of the other 'atopic' conditions (i.e asthma or hay fever).

If you have eczema, your skin may not produce as much fats and oils as other people's, and will be less able to retain water. The protective barrier is therefore not as good as it should be. Gaps open up between the skin cells because they are not sufficiently plumped up with water. Moisture is then lost from the deeper layers of the skin, allowing bacteria or irritants to pass through more easily. Some everyday substances contribute to breaking down the skin. Soap, bubble bath and washing-up liquid, for example, will remove oil from anyone's

<sup>&</sup>lt;sup>1</sup> http://www.eczema.org/what-is-eczema



skin, but if you have eczema your skin breaks down more easily, quickly becoming irritated, cracked and inflamed.

Because it is prone to drying out and is easily damaged, skin with eczema is more liable to become red and inflamed on contact with substances that are known to irritate or cause an allergic reaction.

## **Triggers**

It is known that there can be a wide variety of triggers for eczema. Colours and fragrances in certain soaps and detergents, irritating fabrics like wool, temperature extremes (being too hot or too cold), allergens like dust mites and pet dander, stress, infections, food allergies and sensitivities.

#### Gluten

Researchers have compared the prevalence of eczema in people who also have coeliac disease to eczema prevalence in control subjects. They've found that eczema occurs about three times more frequently in coeliac disease patients and about two times more frequently in relatives of coeliac disease patients, potentially indicating a genetic link between the two conditions.<sup>2</sup>

Eczema has been associated with gluten sensitivity. Specifically, one 2015 study looked at 17 people with non-celiac gluten sensitivity who had skin problems, including rashes that looked like eczema, dermatitis herpetiformis, and psoriasis. The study found these people's skin improved significantly within about one month when those people adopted the gluten-free diet.<sup>3</sup>

Non-coeliac gluten sensitivity is not as well understood as coeliac disease. However, researchers who are studying it say that symptoms include digestive issues, such as diarrhoea, constipation, pain, and bloating plus other symptoms, including brain fog and skin conditions.<sup>4</sup>

## **Medical Treatment**

Typical medical treatment is the use of topical emollients (creams, ointments, lotions) and steroid creams. Topical steroids are used in short treatment bursts and should be used in conjunction with emollients. The creams contain various percentages of hydrocortisone: 0.05%, 0.1%, 0.5% or 1%. If used inappropriately or over long periods of time, topical steroids can thin the skin; blood vessels may become more prominent, and the skin can lose its elasticity, developing 'stretch marks'. Other possible side effects include increased hair growth of very fine hair and perioral dermatitis (i.e. a spotty rash around the mouth).

The medical treatment for eczema in itself does not involve investigating or addressing underlying causes of the skin condition.

**Key Words.** Provide 3 to 8 key words that will help potential readers search for and find this case report. Eczema, inflammation, folliculitis, dry red skin.

<sup>&</sup>lt;sup>2</sup> Skroza N, Proietti I, Bernardini N, Giorgio LV, Mancini MT, Nicolucci F, Pampena R, Tolino E, Zuber S, Potenza C. Skin manifestations in course of celiac disease: case report and review of the literature. Curr Pharm Des. 2014;20(7):1136-8. <u>View Abstract</u>

<sup>&</sup>lt;sup>3</sup> Bonciolini V, Bianchi B, Del Bianco E, Verdelli A, Caproni M. Cutaneous Manifestations of Non-Celiac Gluten Sensitivity: Clinical Histological and Immunopathological Features. Nutrients. 2015 Sep 15;7(9):7798-805. doi: 10.3390/nu7095368. View Full Paper

<sup>&</sup>lt;sup>4</sup> Catassi C. Gluten Sensitivity. Ann Nutr Metab. 2015;67 Suppl 2:16-26. doi: 10.1159/000440990. Epub 2015 Nov 26. <u>View Full Paper</u>



**Introduction.** Briefly summarise the background and context of this case report.

Miss N.N. is a 27 year old woman who had suffered from eczema for the whole of her life, as far as she can recall. Her mother attended the appointments, and can confirm that her daughter's skin was dry, red, irritated and angry from when she was born, although it had varied over time, and was not consistently in flare up as she grew up.

N.N.'s first appointment was at the end of February 2017. She presented with very evident dry, red, itchy and broken skin. She had been suffering from flare ups with the added concern of folliculitis which was not responding to antibiotics.

Two years previously, N.N. had been diagnosed with topical steroid withdrawal (TSW) in 2015.

N.N. had an strong desire to ameliorate her skin condition because it affected her life so much. By implementing a targeted therapeutic programme, N.N.'s skin improved significantly. This case report provides an account of what happened.

**Presenting Concerns.** Describe the patient characteristics (eg, relevant demographics—age, gender, ethnicity, occupation) and their presenting concern(s) with relevant details of related past interventions.

Miss N.N. is a first generation British Chinese from Hong Kong; her parents moved here when was a small girl. For the whole of her 27 years of her life, N.N. can only remember having eczema, something confirmed by her mother who accompanied her to the appointments.

N.N.'s job is an administrative role within the corporate offices of an investment bank, in a team of 8, with whom she works closely. It is a demanding job with deadlines to be met every day. She finds that she is more affected by stressors than in the past.

Over the years, N.N. has used Chinese herbal medicines, naturally enough given her heritage, as well as conventional medical intervention of emollients and steroid creams. She has also seen a nutritionist who recommended dietary exclusions. N.N. has a good idea about what can trigger her skin, what has no impact as far as she can tell and what can help to some degree. However, she is still looking for something that will provide a meaningful improvement in her skin. This became even more pressing due to the recent flare ups and folliculitis which is not responsive to antibiotics, which make her feel worse generally and actively make her eczema worse.

Miss N.N. had also been 'catching' every cold that had been going around her office.

Her health goals reflect where she is at intellectually and emotionally with her chronic skin problem:

- 1. To be free of eczema
- 2. To find the cause of the eczema
- 3. To get through the topical steroid withdrawal as smoothly as possible
- 4. To know what to eat and what not to eat
- 5. To know what supplements to take
- 6. To have a stronger immunity
- 7. To improve stress tolerance



**Clinical Findings.** Describe: (1) the medical, family, and psychosocial history including lifestyle and genetic information; (2) pertinent co-morbidities and relevant interventions (eg, self-care, other therapies); and (3) the physical examination (PE) focused on the pertinent findings including results from testing.

Miss N.N.'s diagnosis of eczema had applied to her for her whole life. There was, however, no family history of eczema or asthma and her mother and father were fit and well. Her older brother is in good health and had no evident signs or symptoms. She had eaten the same food as her brother as she had grown up, although she now avoids all cow's milk but appears to tolerate other dairy products. She believes it is the lactose that does not agree with her.

When we first met, it was very evident just how affected N.N.'s skin was because she was unable to shake hands, and wore protective long cotton gloves. She also worse a cotton vest with a high neck to protect her from any breeze which could act as a trigger for her skin to flare. Her face was very dry, with broken skin, and flecks of red where the capillaries had broken. She moved gingerly, ensuring that she did not cause friction between her clothes and her skin, including sitting down which she did very slowly. It was as if she were a very old woman, from the way that she moved.

In addition to the evident eczema, which appeared as an acute condition as well as it having been present all of her life, was folliculitis, she informed me. She had suffered from this bacterial skin infection from time to time, and in the past antibiotics had resolved it, even though they aggravated the eczema itself. Just recently, however, antibiotics had not resolved a current outbreak of folliculitis.

In the past year, N.N. had also been suffering from colds. If any one of her team at work had a cold, then she was sure to catch it. This made her skin worse too, and she felt heavily fatigued when she was ill.

Her work hours were relatively long, from 8.30 am to 6.00 pm, and it was a demanding job in preparing vital financial information for her colleagues so that they could make their decisions. She worked in a typical office with air conditioning, and no open windows. She advised that this did not suit her, nor her skin and in this way, on Friday evenings when she got home, her skin would be at its worst. It would recover somewhat over the weekend; this was a typical rhythm.

N.N. had written down in advance for me the different treatments she had used and the different types of therapy she had engaged over the years. Given her Chinese heritage, she had naturally taken many different Chinese Herbs and had many courses of acupuncture.

N.N. struggled to sleep and control her scratching at night. She also often got too hot at night (very hot). Her skin was and felt rough all over, and whilst it was thinner due to the topical steroids, it felt like an elephant's skin, as she described to me.

She had used topical steroids throughout her skin condition. However, since University she used topical steroids for about 7 years, more on than off, until April 2015. Since then, she had stopped using steroids, regularly only applying them a couple of times since then because the flare had been so bad. During the last 2 years she suffered from something which is known as 'Topical Steroid Withdrawal' (TSW), also referred to as RSS or Red Skin Syndrome and as Topical Steroid Addiction (TSA). This website is dedicated to the subject: <a href="http://itsan.org/what-is-rss/">http://itsan.org/what-is-rss/</a>. She had been told strictly by her dermatologist to discontinue the steroid cream.

N.N. knew that she needed to avoid certain foods altogether, otherwise her skin flared up:



- crustaceans such as prawns, lobsters, crabs
- kiwi
- chips
- cold and fizzy drinks
- red meat
- other meat such as eel and ostrich

## She also knew what helped her skin:

- Sleeping 10-12 hours
- Baths with Dead Sea salts, bicarbonate of soda and 10 drops of tea tree oil
- Baths with porridge oats / colloidal bath oil
- Tea tree soap
- Tubular bandages
- Epaderm cream
- Cotton fingerless gloves & high-neck cotton vest to prevent air currents from aggravating her skin
- One specific lip balm
- Specific materials of vests & tops
- Cold compression packs from the freezer
- Piriton (1 a day) but efficacy wearing off

## These topical creams were not helpful:

- Dermol 500 lotion
- Folliculitis cream
- Cetreben cream
- Epaderm ointment made it worse!

## Known triggers:

- Stress or feeling annoyed or feeling out of control
- Exercise or heat
- Sweat
- Dust / dust mites
- Beef
- Alcohol (instant hives reaction)
- Sesame seed, Butylene glycol, Limonene, linalool (patch tested)
- Artificial sugars
- Wool (direct contact)
- Wind (esp cold wind)

## These things had no effect, one way or the other:

- Dairy products
- Wheat
- Gluten



- Seafood
- Nuts
- Eggs
- Chinese herbal tea
- Dustmite drops
- Vitamin B Complex
- Vitamin C & Zinc
- Hyaluronic acid &
- Omega 3
- Magnesium
- Probiotics (various)

Timeline. Create a timeline that includes specific dates and times (table, figure, or graphic).

N.N. was born in Hong Kong in 1989. Her mother recalls that she had dry skin from birth and then during all of her childhood. She sought Chinese Herbal Medicine support for her daughter's skin, and mixed various potions over the first 10 years of her life. From time to time topical steroids were needed alongside emollients. Acupuncture was another regular treatment.

Aged 4, N.N. and her older brother were moved to the UK by her parents.

In her teens. N.N. experienced a reduction in her symptoms but there was no specific known reason for this, although it may have been linked with a 100% avoidance of cow's milk, which she has not consumed since.

For most of her life, at any and every age, her eczema dominated her life in terms of what she could and could not do. Swimming, for example, was something that she had not engaged in since she was a small child, because the chlorinated water triggered her skin to flare.

Aged 18 to 20, in 2007-8, when she was at University, her skin became worse when she drank any alcohol, so she quickly stopped that. She experimented with some dietary changes at this time but nothing for more than a few weeks at a time. It was only after leaving University that she visited a nutritionist and followed an exclusion diet or all dairy products and all gluten for 6 weeks, but this made no difference to her skin.

As soon as she started work, she was in a pressured environment, and had needed to resort to steroid cream, which she used for 7 years, and acknowledges that she used it too much. In the meantime, she could still discern triggers and what made her skin feel a little better, or itch less, or be less red and irritated.

In 2015, when she was 25 years old, N.N. was taken off steroids on strong advice from her dermatologist due to the long-term use. Since that time, N.N. had suffered from Topical Steroid Withdrawal (TSW), which she was told would naturally disappear over time, but that time had passed and she still had the same symptoms.

N.N. learned about Functional Medicine and found that its principles matched her own, and she very much wanted to find the underlying cause(s) of her skin condition, and this was all the more prompted by the fact that the most recent bout of folliculitis was not responding to antibiotics, which she had needed to stop.



**Diagnostic Focus and Assessment.** Provide an assessment of the (1) diagnostic methods (eg, PE, laboratory testing, imaging, questionnaires, referral); (2) diagnostic challenges (eg, financial, patient availability, cultural); (3) diagnostic reasoning including other diagnoses considered, and (4) prognostic characteristics (eg, staging) where applicable.

N.N. provided in advance the completed questionnaires and her time-line describing all of the above, and more. She told me that there was no other help that her doctor could offer her because she was not to recommence the steroid cream.

N.N. was not in a position to engage in every test available, she told me, but she was prepared to make whatever changes were necessary and take supplements, as she currently did, but hopefully ones that had more benefits.

After appraising all of her health history, I re-presented her case back to her, noting the complete lack of benefit of the gluten-free & dairy-free diet. We discussed the following potential imbalances that could be involved in her skin condition:

- Increased intestinal permeability
- Lowered secretory immunoglobulin A
- Increased IgG or other immune reactivity to foods with delated reactivity
- Imbalanced gut microbiota, at least due to the antibiotics but also from birth, even though she had no digestive complaints.
- Localised bacterial dysbiosis on her skin
- A GI yeast imbalance or overgrowth, although no symptoms specifically suggested this.
- Stress, and her level of cortisol
- Lack of key nutrients incl omega 6 fatty acids (she currently took omega 3 fatty acids), and zinc (she currently took this), magnesium & vitamin B6 for delta-6-desaturase enzyme, 5,6 and vitamin A.
- Presence of a toxin such as mercury or lead, but no specific evidence to suggest this.

If there had been a reaction to gluten, it would have been more straightforward to suspect that N.N.'s intestinal permeability was compromised. If there was a bacterial issue, it may have been altered or resolved by the taking of antibiotics, but they only served to make her eczema worse. This could have been a real issue in terms of contributory factors for her eczema. We considered the potential value of a stool test that assesses for multiple gut bacteria, as well as yeasts.

N.N. had taken many nutrient supplements over the years and this included B vitamins in the past, and they had made no difference. This persuaded me not to pursue vitamin testing. With the past year's increased

<sup>&</sup>lt;sup>5</sup> Mahfouz MM, Kummerow FA. Effect of magnesium deficiency on delta 6 desaturase activity and fatty acid composition of rat liver microsomes. Lipids. 1989 Aug;24(8):727-32. View Abstract

<sup>&</sup>lt;sup>6</sup> Bordoni A, Hrelia S, Lorenzini A, Bergami R, Cabrini L, Biagi PL, Tolomelli B. Dual influence of aging and vitamin B6 deficiency on delta-6-desaturation of essential fatty acids in rat liver microsomes. Prostaglandins Leukot Essent Fatty Acids. 1998 Jun;58(6):417-20. View Abstract

<sup>&</sup>lt;sup>7</sup> Hon KL, Lui H, Wang SS, Lam HS, Leung TF. Fish consumption, fish atopy and related heavy metals in childhood eczema. Iran J Allergy Asthma Immunol. 2012 Sep;11(3):230-5. doi: 011.03/ijaai.230235. View Full Paper

<sup>&</sup>lt;sup>8</sup> Hon KL, Wang SS, Hung EC, Lam HS, Lui HH, Chow CM, Ching GK, Fok TF, Ng PC, Leung TF. Serum levels of heavy metals in childhood eczema and skin diseases: friends or foes. Pediatr Allergy Immunol. 2010 Aug;21(5):831-6. doi: 10.1111/j.1399-3038.2010.01022.x. Epub 2010 Mar 19. <u>View Abstract</u>



incidence of catching colds and being ill, there was now another variable strongly linked with her systemic immunity and not just mucosal immunity. We also discussed her temperature at night, when she got very hot, suggesting immune activity as if she had an infection.

In conclusion, based on my clinical experience and an understanding that something called eczema coxsackium exists, I recommended that N.N. rule out the presence of a viral burden. I have had patients in the past who have had chronic eczema and they have had raised IgG antibodies to a number of different viruses such as varicella zoster (which causes shingles), coxsackie virus (which causes chicken pox), and one or more of the herpes family. Since N.N.'s eczema was not limited to her hands and feet which is characteristic of eczema coxsackium, but rather all over her body, I selected the tests for varicella zoster virus and HHV-6 virus which I have found to be remarkably prevalent in terms of eliciting an IgG response and consequent inflammation in a wide range of patients with a wide range of conditions, and importantly, when inhibited, patient symptoms have improved. It has been shown to be involved in a diverse number of conditions<sup>9</sup> from skin rashes, to chronic fatigue syndrome<sup>10</sup> and auto-immune conditions<sup>11</sup>.

N.N. asked me what remedies I would recommend should the results come back as positive. She wanted to take something to see if it made a difference, and not await the results before starting on something. She was insistent, and as I have conducted this kind of trial before and seen benefit from so doing, I agreed to this short-term action.

The test results came back within 2 weeks, and showed a very elevated IgG antibody count to the VZV and a borderline positive IgG to HHV-6, as shown below.

Viral Antibody Test – March 2017	Result & Reference Range
Varicella Zoster Virus IgG antibodies (ELISA)	2,437.90 – positive
	<80 IE/I negative
Reference	>80 bis <110 IE/I very weak
	>110 IE/I positive
Varicella Zoster Virus IgA antibodies (ELISA)	0.487 – negative
	< 0,8 = negative
Reference	0.8 to 1,1 = very weak
	>/= 1,1 = positive
Varicella Zoster Virus IgA antibodies (ELISA)	0.073 – negative
	< 0,8 = negative
Reference	0.8 to 1,1 = very weak
	>/= 1,1 = positive
HHV6 IgG-antibodies	+>1:10 – positive
Reference	<1:10

<sup>&</sup>lt;sup>9</sup> Agut H, Bonnafous P, Gautheret-Dejean A. Update on infections with human herpesviruses 6A, 6B, and 7. Med Mal Infect. 2017 Mar;47(2):83-91. doi: 10.1016/j.medmal.2016.09.004. Epub 2016 Oct 20. <u>View abstract</u>

<sup>10</sup> https://www.cdc.gov/cfs/causes/index.html

<sup>11</sup> http://www.immunoscienceslab.com/



HHV6 IgM-antibodies	<1:10 – negative
Reference	<1:10

**Therapeutic Focus and Assessment.** Describe: (1) the type(s) of intervention (eg, preventive, pharmacologic, surgical, lifestyle, self-care) and (2) the administration and intensity of the intervention (eg, dosage, strength, duration, frequency).

The focus of the therapeutic nutritional therapy was on inhibiting the viral burden to reduce the raised antibody count and thereby reduce inflammation which was perceived to be a driving force for N.N.'s eczema. At the same time, support for intestinal lining, mucosal immunity and inhibition of bacteria in her skin that contribute to folliculitis was made.

In the 10-12 days after we first met and before the test results had come back, N.N. took these 2 supplements to inhibit any viral issue that may have been present.

First Supplement Programme	
Humic Acid (ARG)	1 with breakfast & dinner
Takuna tincture (NutraMedix)	2 drops added to water twice daily

When the results came back, we had a telephone appointment and discussed the results. N.N. had not noticed anything in particular over the short time on these supplements, and was realistic that it was a very short duration from which to expect anything. However, she was very pleased that there now a possibility that she had never considered, which could represent a mediator for her symptoms, and even possibly represent an antecedent.

In addition to the anti-viral supplements, I recommended a formula for her gut lining, a supplement with vitamins A, D, E & K the first two of which are vital for mucosal immunity, and the amino acid L-lysine as a viral inhibitor and an emulsified, sustained-release oregano extract as a systemic anti-bacterial agent.

N.N. followed this programme until we next met towards the end of April. I asked her to stop the existing supplements that she had been taking, which are referred to above.

Second Supplement Programme	
Humic Acid (ARG)	1 with breakfast & dinner
Takuna tincture (NutraMedix)	2 drops added to water twice daily
Perm a vite powder (ARG)	1 tablespoon before breakfast & dinner
Vitamin D3 Complete (ARG)	1 with dinner
L-Lysine 500 mg (ARG)	2 mid a.m. & 2mid p.m.
ADP Oregano (BRC)	1 at each meal

N.N. was visibly different when I saw her step out of the lift on the day we met for the second time. She was smiling, as was her mother. She eagerly described what had occurred since we had spoken. She told me that her skin had remained very much the same until 1st April when there had been a visible and perceptible drastic improvement. The severe itchiness stopped, and N.N. felt her skin was much 'stronger', in her words. The night sweats & hot flushes had stopped. She still scratched her wrists slightly at night so she had taken measures to wear a cotton wrist sleeve.



The folliculitis has attempted to come back a few times, but unsuccessfully. Her face had become extremely flaky and then resolved and then was flaky again. She had dishidrotic eczema (small blisters) around her fingers which were hot and uncomfortable. Her scalp remained dry & flaky. However, overall, there was a sea change in the skin over her entire body.

In 27 years of implementing therapies, not once had she or her mother witnessed such a marked improvement.

She had been able to exercise every day, from 1<sup>st</sup> April, and even did hot Bikram yoga twice a week. Whilst her face did become extremely itchy afterwards, she told me she could NEVER tolerate such exercise for many years before this.

She told me that "my skin is feeling like it is so different underneath, feels so much softer and stronger, it's incredible!" & "my skin is so much less itchy, less red, so much better that it was!".

For the next period of time, a very similar supplement programme was recommended, with some subtle changes. I rotated the gut permeability formula with another formula, I decided to put on hold the L-Lysine for this next period of time, and I added an active B vitamin formula with a higher ratio if vitamin B2 (riboflavin can supportive of skin health) as well as active vitamin B6 (pyridoxal-5-phosphate) which is a co-factor in histamine degrading enzyme diamine-oxidase (DAO).<sup>12</sup>

Third Supplement Programme	
Humic Acid (ARG)	1 with breakfast & dinner
Takuna tincture (NutraMedix)	2 drops added to water twice daily
IP.S. Caps (BRC)	2-3 just before each meal
Vitamin D3 Complete (ARG)	1 with dinner
ADP Oregano (BRC)	1 at each meal
Bio-GGG-B (BRC)	2 with each meal

N.N. and I met for a third time in May 2017. The improvements were even more noticeable. Her partner gave his feedback in no uncertain terms, since he was very familiar with her skin, and reported that she FELT so different compared to before. No more 'elephant' skin! However, there were brief flare ups, which had worried her at first but when it lasted but a day, she was less concerned. Previously, flare ups lasted weeks and weeks. In my opinion, this was inflammation expressing itself as part of the viral inhibition, with immune involvement. The blisters on her fingers were less and much less itchy. Her face was less flaky. Her scalp had improved a bit.

She was less sensitive to the air currents and tolerated her office air conditioning much better than before. She had not been ill since she had started the programme, in spite of two of her work team coming down with colds. All of her office co-workers and her bosses remarked on the change they had seen in her. Her face was effectively rejuvenated. Her mother is delighted with the progress. She cannot recall a time that N.N.'s skin has been so good.

N.N. had maintained her exercise schedule and was effectively living a new lifestyle, with virtually no inhibition on what she wanted to do. She also had much more energy than before and had not appreciated how fatigued she had become.

<sup>&</sup>lt;sup>12</sup> Kiehl R, Ionescu G. [Histamine degrading enzymes in atopic eczema]. [Article in German] Z Hautkr. 1989 Dec 15;64(12):1121-3. View abstract



She maintains the same supplements for now, and we plan to monitor her needs, and re-test the IgG antibodies to the 2 viruses in due course to see how much lower the VZV IgG count is, in particular. There are no doubt months and months of active nutritional therapy to engage in, but N.N. is dedicated to this approach. We both look forward to more and more improvements.

## **Supplement Information**

<u>Humic Acid Cell Membrane Active (ARG)</u> - Humic acid has antioxidant activity, helps neutralise and remove toxins, and supports a general sense of well-being. It may also be effective in supporting the body's ability to address viruses. Do also view these articles on our website: '<u>Great Moments in Humic History</u>' & '<u>Earth's Gift:</u> Ancient Soil Deposits Yield Potent Antiviral Potential'.

**Takuna** tincture (NutraMedix) – a plant extract with specific anti-viral properties.

<u>Perm-A-Vite Powder (ARG)</u> - This is the original formula for healing the gut lining formulated by Dr Leo Galland, the functional medicine doctor who coined the term 'leaky gut syndrome'. Provides I-glutamine, MSM, slippery elm and epithelial growth factor (EGF).

**I.P.S. Caps (BRC)** - Provides nutrients shown to be needed for healing the intestinal lining including: glutamine, epithelial growth factor, Jerusalem artichoke, glucosamine sulphate, gamma oryzanol.

**A.D.P. Oregano (BRC)** - This patented oregano extract is a very effective broad-spectrum anti-microbial and anti-yeast agent.

<u>Vitamin D3 Complete (ARG)</u> - Provides the four fat soluble vitamins of A, D, E, & K in a balance that could be disturbed if taking a higher dose of just one of these nutrients over time. The product is preservative free and chemical free and comes in fish gelatine caps. These nutrients are vital for a balanced immune response especially in the mucosal immune system, and are often required in those individuals with auto-immune conditions.

**L-Lysine (ARG)** – an essential amino acid which has the ability to inhibit certain herpes viruses.

**Bio-BBB-G (BRC)** – a low dose, but active form B complex formula.

**Discussion.** Please describe (1) the strengths and limitations of this case report including case management, (2) the literature relevant to this case report (the scientific and clinical context), (3) the rationale for your conclusions (eg, potential causal links and generalizability), and (4) the main findings of this case report: What are the take-away messages?

## Strengths and limitations of this case report including case management

The detailed case history combined with years of experience in the use of an integrated (functional medicine) model of assessment served well in helping to determine what appears to have been a very useful lab test. The focus was not on treating eczema, per se, but on helping to correct the underlying reasons behind the inflammatory skin disorder that affected N.N.

The literature relevant to this case report



There is literature to support multiple possible causes of eczema. The case history, however, helped to exclude many of these. There may be other contributory factors, but in this case, it appears that one major mediator for N.N.'s eczema is the inflammatory effect of the immune response to the VZV and HHV-6.

#### The rationale for your conclusions

The many years of observation and experience of the patient, N.N., combined with my clinical experience contributed significantly to my ability to exclude a number of possible contributory factors for her eczema, as well as identify at least one major contributory factor. The theory that there was a viral role in her condition was not proven by the positive IgG results to VZV and HHV-6, but it was a plausible factor, due to inflammatory immune activity and other symptomology (i.e. getting very hot at night, readily catching colds frequently). The rapid and marked improvement in her symptoms supported the theory well, but it is also recognised that there were other supportive roles of the supplement programme. In the coming months, there may well be other factors that need addressing to consolidate the improvements and hopefully resolve N.N.'s skin condition.

## The main findings of this case report: What are the take-away messages?

As with all case reports, it is the appreciation of the whole case history details that plays a significant role in helping to determining a course of action. There may be many functional lab tests that could have shown 'positive' results but not all would have resulted in the improvements that N.N. experienced. This is where the application of empirical evidence of what affects the patient and what does not and what fits the model to explain the current signs and symptoms is so important.

**Patient Perspective.** The patient should share his or her experience or perspective of the care in a narrative that accompanies the case report whenever appropriate.

"The positive changes in my skin have been undeniable, remarkable and undoubtedly due to the relatively few supplements that I have taken over the past few months, and these supplements have a very narrow focus. I have tried so many different things, and this theory about viral involvement makes so much sense. I now have hope for the first time in my adult life that I can be well and live free from the constraints of severe eczema."

**Informed Consent.** Did the patient give the author of this case report informed consent? Provide if requested.

The patient is not aware her case history is being used, and all identifiable data has been removed. N.N. are not her real initials.



# Case Report Submission Requirements for Authors

**1. Competing interests.** *Are there any competing interests?* 

None Known

**2. Ethics Approval.** Did an ethics committee or Institutional Review Board give approval? If yes, please provide if requested.

This case was not presented to an ethics committee.

**3. De-Identification.** Has all patient related data been de-identified?

All patient data has been re-identified

**4. Author.** Name of Author and practice

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