# Case Histories

# Aches, Pains & Hot Flushes have a Toxicity Link

Gender, Age, Occupation, Nationality, height and weight. Mrs C.D. is a 49 yr old mother of two, living south of London. She is 5' 5" and weighs 9 stone 1 lbs (165.10 cm, 56.44 kg).

# Presenting complaint – list and duration

Mrs C.D. presented with early morning stiffness, aches & pains, chronic low grade spinal pains, sore elbows (tennis and golfer's elbow had been diagnosed), and knees, fatigue, daily hot flushes and a general lack of get up and go.

Her spinal issues had been present for over 20 years emerging after a sporting injury but this was not the reason she was seeking nutritional advice. Her primary reasons were her systemic physical stiffness, especially first thing in the morning, general aches & pains, fatigue & lack of motivation to do almost anything not perceived as necessary or essential.

Historically, C.D. had been a sporty, highly motivated individual and after her children were born she had been fully engaged in bringing them up; they were now 16 (girl) and 10 (boy). She had remained very active physically during this time playing regular sports and training in a gym. Two years prior to her first appointment however, a painful knee had stopped her weekly netball, and shortly after her elbows began to hurt even though she was not doing anything to aggravate them. At about this time, she also described waking up feeling very stiff; taking about 30 minutes of moving around after a shower to feel vaguely normal. It was, she described as if her body needed oiling first thing in the morning.

Her hot flushes started about 18 months prior as well, coinciding with when her periods had stopped completely. This is a relatively young age for menopause, but her mother had been the same age. She described experiencing warm moments on and off during the day and night but she had hot flushes, every night. She had as a result become more and more fatigued and sadly observed that her desire to do anything at all was very low, and that she then felt bad and guilty about the way she had changed. She also felt guilty for her husband too, who supported her unconditionally, because she felt she did not contribute to their lives and relationship as had been the case for the previous 20 years. Her sex drive was also at an all-time low.

C.D. had sought the help of a chiropractor every week for her musculoskeletal symptoms, but only had minimal transitional benefits which were not sustained, and accordingly she was seeking a different approach. Her GP had prescribed HRT 18 months ago, and rather than help her hot flushes, within two weeks it had made her feel worse on all levels, so she had stopped the medication. Currently she took neither medication or nutritional supplements.

#### **Any Investigations**

Her visit to her GP 18 months before, had involved no blood tests or other investigations, simply the prescription for HRT.

The chiropractor had made the diagnosis of her elbow symptoms as being 'golfer's elbow' in one and 'tennis elbow' (medial and lateral tendonitis) in the other.

On the nutritional front, C.D. ate soundly, avoiding dairy products, consuming a fruit smoothie with almond milk at breakfast, then eating a lean protein with vegetables and potatoes at lunch, and a wholefood dinner that would also include an animal protein with vegetables and a starch such as rice or pasta. She ate wheat once a day on average, but was not aware that this provoked any of her symptoms.

C.D. told me that since she had been feeling like she had aged rapidly, that she had become more aware of the importance of her food intake. She now ate less sugar than she had, and had avoided all dairy products. She reported feeling less bloated but did not experience any other benefits. She had not avoided wheat or gluten, and did not know if they could be involved in her symptoms, and emphasised she had eaten them all of her life.

We chatted about the possibility of an adverse reaction to the nightshade family (potatoes, tomatoes, peppers etc), for example, but ruled this out as a prime suspect due to the relatively low level being consumed and the other factors involved, particularly her adverse reaction to the prescribed HRT.

C.D. felt that her hormonal changes, and related age, were central to her symptoms, but as she could not tolerate HRT she really did not know what to do. She repeated that she felt like she had aged by 30 years in the space of less than 2.

One functional test was recommended by myself - which is detailed below.

#### Strategy

The strategy was to investigate possible underlying causes of the signs and symptoms that C.D. was experiencing, and then to address and correct them.

A re-presentation of her signs and symptoms in a Mind Map format proved very helpful in identifying possible contributory factors or causes

of her relatively recent manifestation of aches, pains and hot flushes. The reaction to the HRT was also a key prompter to an enquiry about her liver's ability to handle medications and other toxins, and certainly helped to trigger the thought that it was impaired liver detoxification function that resulted in increased and inadequately quenched oxidative stress.

I considered what could be present in excess in the body that could have contributed to this (and therefore may be removed), or what insufficiency may be present (and what may be added), and what could explain the case history information. I considered that an environmental toxin exposure may have coincided with her body's gradually reduced capacity to safely and effectively eliminate exogenous challenges.

In conclusion, the first test I recommended was a urine toxic element challenge test, in order to help rule out or in the presence of excess toxic metals of one kind or another and too determine her bodies overall burden of these elements.

Her test results identified an excess of mercury and lead, a finding which in itself is not that uncommon in mine and other peoples patient lists, but the highest score above the reference range was for nickel. (There are a number studies that have associated exposure to nickel with arthritic conditions.)

I am also aware of the newly available antibody testing from Cyrex Labs which tests for antibodies to toxic metals bound to tissues which may be another and possibly more accurate way to determine how well the body is immunologically handling exposure to environmental metals. C.D. had made it easy for me to make the decision as to which test was done because she strongly disliked giving blood, and as she was going abroad soon she had stated she would gladly do the urine test first, and then the blood test if the first was inconclusive. I would certainly have liked to have both test results available to compare them but I do not.

# Diet & Supplements: name and dose

The dietary changes recommended to C.D. based on her symptoms and the test results were modest. The addition of a non-dairy protein supplement (Pea Protein) to her smoothie was designed to offer support for her blood glucose balance, adrenals, neurotransmitters and importantly her phase 2 liver detox conjugation pathways – given that amino acids are essential precursors for these enzymes.

I recommended increasing cruciferous and liver supportive vegetables too. Also, in order to support overall nutrient density, I recommended she consume fewer grains. I did not pursue a wheat or dairy free diet at this stage, but they were markedly reduced overall within the original recommendations.

In addition, these therapeutic supplements were recommended:

# Phase One Programme (1<sup>st</sup> month)

Product & Brand	Dose
<b>Thiodox (ARG)</b> (glutathione support).	1 tab with each meal.
NT Factor Advanced Physician's Formula (NTI) – (lipid replacement therapy + nutrients).	2 with breakfast & 2 with lunch & 1 with dinner.
PorphyraZyme (BRC) (toxin binding support).	1 with breakfast, 2 with lunch & 2 with dinner.
Arthred Powder (ARG) (joint support).	1 scoop before breakfast & dinner.

# **Thiodox (ARG)**

Supports a healthy liver detoxification; primarily phase II, provides antioxidant protection, supports a healthy immune function and production of glutathione, facilitates the production of cellular energy, enhances the effectiveness of other antioxidants. Provides NAC, glutathione, lipoic acid, selenium, riboflavin, thiamine & vitamin C.

#### NT Factor Advanced Physician's Formula (NTI)

Combines NT Factor® mitochondrial membrane food with B vitamins and other nutrients. NT Factor® supports the structural integrity & vitality of the membranes in the body's cells and mitochondria, including normal membrane permeability and ATP energy production.

More information about <u>Lipid Replacement Therapy</u> on our education website.

# PorphyraZyme (BRC)

Porphyra-Zyme<sup>TM</sup> - A Concentrated Prophyrin Product. Unlike traditional chlorophyll products, Porphyra-Zyme is a concentrated porphyrin supplement. By increasing the porphyrin content, its heavy metal binding capability is also increased, providing clinicians with a natural, effective "chelating" nutrient.

Porphyrins have the ability to bind divalent metal ions due to the nitrogen atoms of the tetrapyrrole nucleus. The central ion in chlorophyll is magnesium, which is freed from chlorophyll under acidic conditions, permitting other metals to bind in its place. Toxic metals, such as mercury, lead and arsenic, are then complexed by the porphyrins and eliminated through the gut and bladder.

### Arthred® Powder (ARG)

A patented, pre-digested collagen powder that has been demonstrated in multicentre hospital led trials to reduce articular joint arthritic pains and the need for pain medications. In addition, it has also been shown to be useful to heal the gut lining and support skin health. It is also very effective as an adjunctive healing support post injury.

We met after 5 weeks, during which time C.D. had been abroad for 2 weeks. She reported that her warm moments during the day and the hot flushes had markedly diminished after two weeks on the programme, which had surprised her since the programme had not ostensibly been focused on her female hormone balance. This was somewhat ironic because she had spent the two weeks abroad in the Caribbean where it had been very much warmer, and drier, than the UK.

In terms of health changes, it had only been in the previous week had C.D. felt that her early morning stiffness had been reduced on a few days but this had also been quite a noticeable difference on those days. For three or four mornings of the past week, C.D. had awoken and moved out of bed and visited to the bathroom only to realise that she had not had to 'creak' her way there with tight Achilles, ankles, sore knees and tense thigh muscles.

These changes had in themselves helped C.D. to begin to feel better as she felt that she was now more in charge with what was happening to her body. She did not, as she described, at this stage have any more energy or 'get up and go'.

As a result of the positive signs of improvement, I recommended that she follow a virtually identical programme; only the dosing of the supplements was subtly altered, as is shown below. Given her encouraging start, she also asked me to ensure that she was eating as well as possible at each and every meal, so we re-visited everything that she had been eating. Her diet had been almost exemplary and she now felt she had a clearer understanding of everything that she was eating and why.

Although we mutually agreed that we were uncertain that gluten present in the wheat she was consuming was in any way a negative factor, and she had been eating less, we agreed that she would now embark on a 100% gluten free diet.

C.D. was, for the record, also alcohol free throughout the whole of this time, since she had first consulted with me. She explained she was unable to tolerate alcohol very much and this had become more apparent over recent times, and was another symptom that had suggested reduced liver detoxification capacity and or environmental

toxins being an issue in her symptoms.

# Phase Two (2<sup>nd</sup> month)

Product & Brand	Dose
<b>Thiodox (ARG)</b> (glutathione support).	1 tab with each meal, 1 at bedtime.
NT Factor Advanced Physician's Formula (NTI) – (lipid replacement therapy + nutrients).	3 with breakfast & 2 with lunch.
PorphyraZyme (BRC) (toxin binding support).	2 mid morning, 2 mid afternoon.
Arthred Powder (ARG) (joint support).	1 scoop before breakfast & dinner.

After 5 further weeks of her high quality diet, C.D. revisited me and reported that her early morning stiffness was much reduced most mornings and completely clear on some. However, it was just as bad on other mornings. She had only experienced hot flushes on a few occasions and they were very much less frequent.

Her spine had troubled her as it had for many years, and did not seem related at all to the recent development or reduction in symptoms.

We discussed the difference between heavy metal or metal toxicity vs excess body burden. C.D. had discovered that she did not know the difference when challenged by a friend who questioned what she was doing, and that heavy metal toxicity was very serious and should be treated medically. She had called me at the time, expressing some concern, and after a brief explanation on the phone, and as a reminder of what had been said when the results were received, we agreed to go through this again when we met next. This is not the first nor I suspect be the last time when a conversation with someone else prompts anxiety about a programme that is being followed by a patient. The ability to respond to the phone call of email rapidly is definitely of importance, and is one of the occasions when I recommend that this service, if it can be called this, is extended to all patients. Some patients may otherwise abandon the nutritional programme without such reassurance and the opportunity to explore again the explanation about what the results indicate.

In terms of her energy, C.D. had noticed that she was feeling more energetic and more positive. She now wanted to do anything she could to improve these beneficial changes which she judged to be about 20%

of what she needed to recover full function.

I recommended a slightly revised programme, changing the Arthred for a different anti-inflammatory supplement, and included Stamina Caps (BRC) because this helps with improved energy and also helps with specific nutrient support for a healthy blood brain barrier (BBB).

Phase Three (3<sup>rd</sup> month)

Product & brand	Dose
<b>Thiodox (ARG)</b> (glutathione support).	1 tab with each meal, 1 at bedtime.
NT Factor Advanced Physician's Formula (NTI) – (lipid replacement therapy + nutrients).	3 with breakfast & 2 with lunch.
PorphyraZyme (BRC) (toxin binding support).	2 mid morning, 2 mid afternoon.
KappArest (BRC) (anti- inflammatory support).	2 with each meal.
Stamina Caps (BRC) (energy support).	2 with each meal.

#### KappArest™ (BRC)

Provides a blend of proven anti-inflammatory plant extracts and antioxidants with BioPerine which enhances the uptake and efficacy of these ingredients. The formula was developed to compress inappropriate NF-kB (nuclear transcription factor kappa B) activity which influences a gene encoded inflammatory cascade and related pro-inflammatory cytokines.

### **Stamina Caps (BRC)**

This formula provides thiamine, pantothenic acid, L-Carnitine, octacosanol, coenzyme Q10 & OOrganik-15™, which may serve to aid in energy production and to increase stamina.

In my clinical experience this formula has made a positive contribution to energy production and stability and stabilisation of appetite. Vitamin B1 & B5 are needed to help support a healthy blood brain barrier (BBB).

# Phase Four (4<sup>th</sup> month)

C.D. came to see me after 5 weeks of following the changed diet and supplements, and had been well supported by her family during this time due to the progress she had been making, which had been

noticeable by them all. She felt a lot better in the morning, and had come to terms with the vagaries of periodic bad morning, where she was very stiff. In my opinion, which I shared with her, I estimated that this was a symptom that her liver detoxification pathways were unable to completely render harmless challenges that induced oxidation and that this was linked to how she felt on those days.

She ached less and was less constricted by physical discomfort on a day to day basis. She had even re-visited the gym for light workouts which had greatly helped her mood. There were no adverse after effects from this training either.

C.D.'s energy had overall continued to improve, as had her general attitude, and this had been very noticeable from her family's perspective.

As we had discussed before, we wanted to minimise the supplements whilst she achieved the best outcome possible, so I suggested she aim to reduce a number of the supplements to help determine their lowest effective dose, and I set the lowest level I felt this could be achieved at this stage (shown below).

Product & Brand	Dose
<b>Thiodox (ARG)</b> (glutathione support).	1 tab with each meal, reducing to 2 minimum.
NT Factor Advanced Physician's Formula (NTI) – (lipid replacement therapy + nutrients).	3 with breakfast & 2 with lunch, reducing to 3 minimum.
PorphyraZyme (BRC) (toxin binding support).	2 mid morning, 2 mid afternoon.
KappArest (BRC) (anti- inflammatory support).	2 with each meal (2 b.i.d. minimum).
Stamina Caps (BRC) (energy support).	2 with each meal (2 b.i.d. minimum).

# Phase Five (5<sup>th</sup> month)

C.D. reported that she had continued to make improvements but felt that they were not helped when she reduced the supplements so she remained on the higher doses.

She was training regularly back at the gym, and was going to re-establish her place at the netball evening soon. Her back troubled her but this was excluded from what was happening with her nutritional programme, even with the Arthred (ARG) and then KappArest (BRC).

She was feeling more 'get up and go' and energy and more like her old self, and was just very pleased that she had found a way out of the 'grey hole' that she had been in when she first consulted with me.

We discussed re-testing and the relevance and use of a re-test and agreed that the focus was better spent on ensuring she was feeling as well as she could. Her morning stiffness was virtually gone, and her elbows and knees were much less symptomatic. Her hot flushes did disturb her sleep from time to time, but on only a few occasions a month. In recalling this, it reminded her that she used to experience them every night.

C.D. was equipped with knowing how to reduce her supplements whilst maintaining the benefits and she is now engaged in experimenting to develop the lowest doses (see guidelines above).

#### **Duration**

C.D. has followed a relatively extensive programme of supplements in addition to a very nourishing diet whilst avoiding diary, alcohol and then gluten for over 6 months. She intends to continue in this food management plan for the next few months, at least, and determine what doses of the supplements are required to maintain her improvements.

We agreed that when she does not need the supplements, or rather as she needs them less and less, that an explanation may be that her overall body burden of toxic metals is likely to be significantly reduced. We also agreed that a few months after she is taking a low level of the supplements and even stopping a few of them that a re-test of the urine challenge test would be done.

#### Outcome

C.D. has almost returned to the energetic and motivated state of being she had before the onset of menopause. The effort to recover her wellbeing has not been insignificant and she has followed an extensive supplement programme.

Her diet has been outstanding in its quality and in the strict avoidance of certain food groups. Since she feels so much better, and associates the nutritional changes with her improvements she and her family are more than committed to the healthier eating patterns. They are delighted to have their mum / wife back to being on good form.

#### **Comments**

As with so many other cases, it is the original observation of a key imbalance within a patient combined with the knowledge and ability to support the biochemistry to overcome this imbalance that has led to a

very satisfactory outcome.

For clarification: At no time, did I say or imply that she had been poisoned by toxic metal (e.g, mercury, lead or nickel) and that this was the cause of her symptoms. Rather what was said was that her ability to conduct the necessary daily biotransformation of toxins (endotoxins and exotoxins) was likely impaired leading to (amongst other disturbances) excessive oxidative stress that manifested as systemic inflammation, aches and pains, altered energy and neurotransmitter function. (See article by Dr Marty Pall)

The detailed case history with two key symptoms (Triggers); being her reduced tolerance of alcohol and the strong adverse reaction to HRT, prompted the urine challenge test for metals (toxins). Then there was my clinical experience with understanding what might be effective, in terms of specific nutritional supplements. For C.D. the products remained relatively constant, whereas for others, the products need changing more often. The repeating of her story through the mind map helped engender the 'meaning response' and ensured that we both understood the aims and objectives of the interventions.

There is published research which focuses on the association between nickel and arthritic symptoms, but it would be speculative for me to say that it was the nickel, mercury or lead which was a causative trigger. Instead, in my professional opinion, it was the gradually reduced efficacy of her liver detox capacity (something that can be brought on by genetic or environmental changes or a combination) that led to an accumulation of these environmental toxins (there were likely others as well – but not tested for) and then the consequent compression on her detoxification pathways which led to systemic inflammation – of a modest but persistent volume. C.D.'s menopause was a triggering event that increased the expression of this imbalance leading to the development of her symptoms.

It is hoped that she will be able to make further progress in the reduction of the supplements and in due course we can see a repeat test that has all three of the potentially troublesome metals comfortably in their normal reference range.

**Practitioner** 

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