Complementary and Alternative Medicine and Psychodermatology

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CAM Approach to Dermatology Focuses on the Whole Person, Including Psyche and Environment

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Introduction

Complementary and alternative medicine (CAM) takes an integrative and systems approach to dermatology. CAM modalities, such as nutritional therapy, acupuncture, Chinese herbal medicine and phytotherapy/western herbal medicine, consider the person as a physical, psychological and social whole and part of their environment, rather than focusing on the body or the disease alone. We now recognise that the mind and body are one, connected by multiple communication pathways, including those from the gut microbiome to the brain. The question for this patient-centred approach is: how is this unique individual functioning with this condition, in what environment, and how can their functioning be improved?

As a result, and as a principle, CAM considers the psychological aspect of any disease when assessing the whole person's functioning. Emotional or mental factors, however minor, may influence all physical conditions. In turn, these are determined to a great extent by the gut microbiome and diet as well as by other powerful factors such as economic status and relationships. The overall aim of CAM is to rebuild the patient's healthy functioning for the long term and coach them to take more control of their health.

CAM and Psychodermatology

CAM's holistic approach has much to offer psychodermatology, as well as to primary psychiatric and primary dermatological disorders. It aims to address the complex patho-aetiology of a condition in a specific way, given the multiple causes of disease from the interplay between a unique individual and their environment.

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In primary psychiatric disorders, CAM treatment may be geared towards the patient's emotional state and nervous system, whereas in primary dermatological conditions it would also address both the nervous system and more organic pathophysiology. In both, encouraging patients to take an active role in their healthcare, however small, can be therapeutic. Clinicians in standard health services may have limited time to give lifestyle or dietary advice, so CAM practitioners may play a valuable role in both hospital and GP surgeries.

Disease Seen in Terms of Function

CAM's approach to disease also tends to view illness as the body/mind signalling an attempt to readjust to excess stressors. In this approach, illness is seen as the body's likely response to force us to stop and consider what changes we need to make to our diet, lifestyle, emotional state and environment. Instead of a pathology to be cured, it is more about better managing the body–mind interaction. This means first reducing the stressors and upstream causes, and then supporting function by improving the basics of circadian rhythm, diet, sleep, exercise, emotional well-being and the interconnected systems including digestion, circulation, liver metabolism, immune responses, the brain–gut and hormonal functions. As well as giving medicine or treatment, educating the patient in self-care is an important aspect of CAM.

Meaning of the Disease to the Patient

Psychologically, the disease itself may have important and fundamental meaning to the patient. As CAM clinicians, especially in psychodermatology, our job is to identify this as part of the multiple aetiology behind a person's condition. Our treatment of a patient aims to reflect and work with many aspects of their individuality and complexity.

Expanding the Patient's Sense of Self

Chronic skin disease often confines us as patients, narrowing our sense of self and confidence, our lifestyle, physical activity and social lives. A vital part of the CAM clinician's role is to expand the patient's sense of self, to recognise their many internal resources and recover their agency. Self-care is seen to be at the heart of resilience. At the very least, this will help the patient to manage their disease and live better with it.

Purpose of Treatment

By focusing not only on symptoms but also on underlying causes, the aims are:

- To improve the patient's various body functions

- To build the patient's resilience to disease
- To enable the patient's greater control over their condition

The treatment may take longer as a result of this approach, which requires the patient's understanding and cooperation.

Herbal Medicine and Phytotherapy

Western medical herbalism or phytotherapy, Chinese herbal medicine, Ayurveda and Unani Tibb are among the most widely practised forms of herbal medicine. Herbal skin products make up one of the four biggest natural products sold over the counter and herbal medicine has a growing global market share.

Western herbal medicine (phytotherapy, as it is known in Europe) will be used here as an example of CAM in psychodermatology alongside conventional medicine, as a medical herbalist clinic has operated within Whipps Cross University Hospital Dermatology Outpatients in London, UK, since 2000. Medical herbalists/phytotherapists are trained in rational, evidence-based natural medicine, underpinned by 3-4 years of biomedicine, nutrition, pharmacology, phytochemistry and clinical training. Scientific knowledge and research evidence is used to inform and refine valuable traditional herbal wisdom, clinical experience and patient opinion.

In professional herbal practice, there is no one herb for one physical or psychological condition. Several herbs are chosen for their pharmacological actions that together target multiple underlying factors. Each herb has at least two or three actions that improve specific cell, tissue or organ function. One person's eczema may be more anxiety-related than another's where gut dysbiosis predominates, so may be given bitter hops (calming and acting on skin/liver function), liquorice (anti-inflammatory, adrenal cortisol-sparing) and ashwagandha (adaptogenic to stress). A patient with rosacea accompanied by anxiety and hypertension may receive a mix including hawthorn (its cyanogenic glycosides calm and support myocardial function) and lime blossom (flavonoid-rich with relaxant and vascular support).

Herbal Pharmacology

Plants produce secondary metabolites for defence and communication, known as phytonutrients or phytochemicals. Phytonutrients are pharmacologically active compounds and are in all plant foods but especially concentrated in herbs and spices. They include anti-inflammatory, antimicrobial, immune-stimulating polyphenols (e.g. flavonoids, lignans), alkaloids, anthraquinones, cardiac glycosides and essential oils, which are particularly antimicrobial. Having co-evolved with plants, we have depended on their phytonutrients over millennia as the crucial medicinal part of our food. Whole food plants and herbs, if their phytonutrient content has not been degraded through breeding, chemical sprays, fertilisers and equally degraded

soils, will produce a diverse array of these vital chemicals. Most phytonutrients are stored in the plant's skin, pith and seeds, where their functions are most needed.

Efficacy and Safety of Plant Medicine

In an individualised prescription, herbs are selected for the evidence base of their pharmacology, traditional and modern clinical use showing how they address specific physiological functions and pathways. A particular part of the plant is used, be it root, leaf, flower or other parts, for its known therapeutic effects. Its safety profile and potential drug interactions are taken into account. Ensuring the authenticity of species and plant parts, along with a therapeutic dosage, is essential for efficacy.

Consultation and Diagnosis

Typically, patients have a 1-hour first consultation followed by several half-hour follow-ups. The first consultation with the patient includes:

- Explaining simply how herbal medicine/phytotherapy works, a collaboration between clinician and patient to include active self-care where possible, the patient's own wishes and expectations of treatment and the possible time-scale for treatment and likely outcome.
- A comprehensive medical history, current medical diagnoses, drug and health supplements, the state of each body system, a physical examination, pulse rate and blood pressure readings.
- Their basic daily functioning:
  - Sleep: time to bed, night waking and causes, quality, wake time
  - Digestion: appetite, bloating, wind, food irritants, bowel habit
  - Psychological state, including work/life balance, relationships
  - Exercise: what and how often
  - Daylight: how much and when—both for vitamin D and for circadian entrainment
  - Diet: meal times, specific food types and plant family intake, drinks, portion size
  - Smoking, alcohol, drug intake, other
- The patient's own treatment priorities—what matters most to them.
- A self-reported symptom outcome measure (an adapted MYMOP/Measure Your Medical Outcome Profile) is found to be a therapeutic tool for both patient and practitioner at Whipps Cross Hospital.

This comprehensive consultation allows the medical herbalist to build on the dermatological and/or other medical diagnoses to identify and address possible pathophysiology contributing to them:

- Inflammatory responses, local and systemic, including those arising from disrupted functions below
- Blood sugar/insulin responses
- Liver metabolism—phase I (creating reactive compounds) and II (conjugating/modifying reactive compounds for excretion)
- Circulation (micro and macro)
- HPA hypothalamic pituitary adrenal axis and hormonal function
- Immune responses (innate and adaptive including Th1/Th2, Th1:Treg
- Digestive functions (gut microbiome, gut–brain axis and neuroendocrine)
- Circadian rhythm

Other relevant investigations or referrals to medical colleagues may be made to clarify any comorbidity and its causes.

Treatment Plan

1. Apply basic self-care to reduce stressors on the body and nudge homeostasis.
2. Apply herbal medicine to improve key physical and psychological functions and address specific pathophysiology.

Basic Self-Care

The first step in the treatment of almost all conditions is to address diet, sleep, circadian rhythm and lifestyle. These are fundamental to supporting immune function and reducing systemic inflammation. Any concurrent medicine will then be more effective. We train our master and peripheral body clocks by matching our habits to the natural peaks of hormones, enzymes and neurotransmitters with daylight exposure, eating, sleep, rest and movement. This synchronicity reduces stress on the body and nudges optimal function to build resilience.

Diet Eating a diverse diet of unprocessed whole food and in time with our body clocks ensures balanced blood sugar and insulin levels. This is of fundamental importance in:

(a) How we deal with stress/anxiety by supporting adrenal response and moderating the effect of adrenaline
(b) Reducing inflammatory responses induced from excess hormones (oestrogen) and other inflammatory mediators driven by insulin and fat
(c) Addressing the health of the gut microbiome and brain–gut axis

In addition, fundamental to appropriate anti-inflammatory responses and nerve function is sufficient healthy fat intake. The brain and nerves are 60% fat, and the

body has to be provided with essential fatty acids, including omega 3 alpha-linolenic, EPA and DHA and omega 6 linoleic acids from the diet to produce inflammatory and anti-inflammatory reactions.

Diet diary and eating pattern Patients are asked to write a week's detailed food diary with timings. This facilitates step-by-step food changes and builds the patient's awareness and agency around when and what they eat. We explain simple principles and how foods affect the body/mind and give recipes rather than a specific, limiting diet. The key is to widen out the diet, inspire the patient with understanding to start with simple changes. Eating a wide range of foods is central to our design so that our many metabolic pathways are provided with the substrate needed to moderate inflammatory and immune responses.

See Tables 30.1, 30.2 and 30.3 for a summary.

The Gut–Brain–Skin Axis

There is symbiosis between our gut microbes and systemic immunity. Beneficial microbial species are fed by fibre-rich, deeply coloured whole foods to produce SCFAs/short-chain fatty acids, particularly butyrate, which suppress immune responses by inhibiting inflammatory cells' proliferation, migration, adhesion, and cytokine production. They are involved in the regulation of hair follicle stem cell differentiation and wound healing. Gut dysbiosis with disturbed tight junctions in the intestine's epithelial barrier can allow proteins, bacteria and intestinal microbes to enter the bloodstream, accumulate in the skin and disrupt its homeostasis. The gut microbiome also appears to influence the skin microbiome and its defence mechanisms, by producing strongly antimicrobial skin SCFAs. Oral supplementation of gut microbes, i.e. probiotics, may be helpful, but it is still not fully understood which species are needed in a specific patient.

Sleep: Self-Care and Herbal Medicine

Sleep is crucial to our circadian rhythm to allow rest and repair of genes, gut villi, brain cells and liver along with all other tissues and functions and reduce inflammation (Table 30.2).

Example of a Herbal Prescription for Patient with Eczema and Anxiety

This could be delivered as an alcohol-based tincture containing several herbs, or as dried herbs to be infused or decocted in a tea, as tablets, capsules or powder (Table 30.4).

Table 30.1 Anti-inflammatory, hormone- and immune-modulating diet

Guidelines (recommendations)	Foods and therapeutic actions
• Mostly wholefood plants complete with their edible skins, pith, seeds • Most in daytime, ideally within 10 h—eat either substantial fibre-rich wholefood breakfast or lunch as main meals • Mostly: small portions early evening meal to allow gut repair overnight • Wide variety of plant foods, some raw • Rainbow colours especially dark	• Fibre-rich wholefood > for gut microbiome (immunity, neurotransmitter, vitamins), bowel function, raise sex hormone-binding globulin/SHBG • Legumes (beans/lentils) 1 portion/day > protein, probiotic fibre, raise SHBG, bind ER to moderate inflammatory oestrogen levels • Oily fish high in omega 3 fatty acids—sardines, mackerel, salmon, pilchards, sprats—three times/week > provide skin EFAs essential for cell barrier, signalling, local and systemic anti-inflammatory responses • Green leafy veg 1–2 portions/daily > for minerals, phytonutrients, fibre, probiotics • Nuts mixed, especially walnuts and Brazil nuts (selenium-rich) • Mixed berries for anti-inflammatory polyphenol pigments and vitamin C • Seeds especially linseed, pumpkin (zinc-rich), sunflower—best ground to access oil—for unoxidised omega 6 and other EFAs for skin/nerve and immune function • Avocados, nuts, seeds and their cold-pressed oils for vital • Polyphenol-rich pigmented foods e.g. carrots, beetroot, squash, turnip, pumpkin and their oil/fibre-rich seeds • Water or green/herb tea intake >1–1.5 L/day • Add 1–2 tbs chopped parsley or coriander daily to a meal to increase micro and phytonutrients
• Avoid known triggers—alcohol (flavonoid-rich red wine may be less inflammatory than white), spicy and sugary foods/drinks that promote inflammation	• If diet is poor, consider supplementation: omega 3 fatty acids, vitamin A, vitamin C, zinc, selenium, etc., probiotics
• Avoid or reduce refined carbohydrates; our bodies, not machines, are designed to process them slowly in order to release glucose gradually into the bloodstream and spare insulin	• Substitute with filling, nutritious wholefood containing protein e.g. beans/lentils, wholegrains/seeds (short-grain/wild/basmati/red/black/brown rice, quinoa, millet)
• Remove possible food irritants one at a time for 3 weeks then reintroduce to see if symptoms return over 2–3 days. Common allergens or inflammatory triggers to gut villi, initiating immune responses are: cow's milk, eggs, soy, wheat gluten, nuts, shellfish	• Ensure full nutrition with wholegrains/seeds (short-grain/wild/basmati/red/black/brown rice, quinoa, millet and beans/lentils) provide more protein and other nutrients than refined wheat bread, cakes and pastry NB if patient not used to beans/lentils, start with small portions and increase gradually to allow gut microbial species that consume these foods to multiply and so avoid increased flatulence

Table 30.2 Guidelines and herbal medicines

Guidelines	Herbal medicine	Herbal therapeutics and pharmacology—examples
Reinforce circadian rhythm: • Set mostly regular bedtime, ideally well before 11 pm to reinforce body clock's cortisol fall and melatonin rise, though this varies whether patient is a lark or an owl • Aim for 8-h sleep window with 7+ hours sleep and minimal latency • Wind down pre-bedtime, e.g. hot bath to relax and lower core body temperature for sleep • Reduce stimulating TV/screen time and use night-mode to cut out blue light	**Herbs** general relaxants, sedatives, anxiolytics: valerian, hops, passionflower, skullcap, lavender, chamomile	Valerian *Valeriana officinalis* sesequiterpenes and other compounds are sedative by binding GABA to inhibit its breakdown similar to a benzodiazepine effect Hops *Humulus lupulus:* sedative through GABA modulation Chamomile *Matricaria chamomilla* Benzodiazepine agonist, Ca channel inhibitor, MAO inhibitor, blocks noradrenaline uptake Passionflower *Passiflora incarnata* benzodiazepine partial agonist
• Address sleep disrupters, e.g. menopausal hot flushes, anxiety, disrupted circadian rhythm, indigestion, light bedroom, improve sleep hygiene	**Herbs** for cause of sleep disruption: *Menopausal flushes* black cohosh, lady's mantle, astragalus, hops, zizyphus *Indigestion* eat less and earlier and bitter herbs, e.g. gentian, antispasmodics fennel, ginger; anti-inflammatory chamomile; heartburn: slippery elm powder, liquorice *Disrupted circadian rhythm* herbal adaptogens to reinforce rhythm: astragalus, Siberian ginseng, ashwagandha *Anxiety* herbal anxiolytics (as above)	Black cohosh root *Cimcifuga racemosa* (saponins, glycosides, salicylic acid) calming, reduces hot flushes likely via synergistic cAMP, serotonin, GABA and dopamine modulation Astragalus root *Astragalus membranaceous* (saponins, polysaccharides) Gentian root *Gentiana lutea* (bitter glycosides, alkaloids) stimulates bitter TAS2 receptors to increase absorption, delay gastric emptying, manage hyperglycaemia Slippery elm bark powder *Ulmus fulva* its mucopolysaccharides coat gut endothelium and feed gut microbiota as prebiotic Ashwagandha *Withania somnifera* (alkaloids, lactones, saponins) adaptogen, anti-inflammatory, nervine sedative

Table 30.3 Herbal treatment of physical and psychological aspects of skin disease

Condition	Treatment	Pharmacology
Depression and fatigue	**Self-care** Regular sleep/wake time, plenty of daylight. **Diet** as above for gut microbiome to provide SCFA energy and neurotransmitters, EFAs for nerve function, balance sugar levels for mood, lower inflammatory mediators **Herbs** may include, e.g. St. John's wort *H. perforatum,* skullcap, rhodiola, ashwagandha, Siberian ginseng, rosemary	St. John's wort *Hypericum perforatum* (Fig. 30.1) **NB Significant, potentially fatal drug-drug interactions are possible**
Stress/anxiety	**Self-care** and **diet** as above **Herbs** may include lime blossom, skullcap, hops, valerian, hawthorn	*Crataegus spp.* hawthorn

Table 30.4 Example of a herbal prescription for patient with eczema and anxiety

Functions/conditions	Herb types by action	Herbs
Inflammation	Skin/systemic anti-inflammatories	Turmeric (Fig. 30.2) *Curcuma longa,* Baical skullcap *Scutellaria baicalensis*
GI secretions	Digestive stimulants or antispasmodics	Gentian *Gentiana lutea,* wild yam *Dioscorea villosa*
Sleep	Sedatives/relaxants	Valerian *Valeriana officinalis,* Passionflower *Passiflora incarnata*
Anxiety	Anxiolytics	Skullcap *Scutellaria lateriflora,* St. John's wort *Hypericum perforatum*
Micro/macrocirculation	Circulatories	Capsicum *Capsicum minimum* (Fig. 30.2), ginkgo *Ginkgo biloba,* cocoa *Theobroma cacao*
Anxiety, stress	Nervine and psychotherapeutic herbs as above	Herbs as above

Fig. 30.1 St. John's wort, hawthorn, herbal tincture and infused oil

Turmeric

Capsicum infused oil and cream

Fig. 30.2 Turmeric and capsicum infused oil and cream

Topical treatment
Creams or ointments will be given as required with tissue healing herbs such as marigold, circulatories such as capsicum and anti-inflammatories such as liquorice or turmeric.

Other Examples

Rosacea
Hippocrates saw food as medicine. A red face meant that blood was too acidic, and alkaline-forming foods or "cold foods" were given. This has now proved to be good practice, as evidence supports a link between rosacea and gut dysbiosis and microbiome balance and metabolism.

Quality of food, herb supplements and registered herbal medicines
Caution: Most of the herbs bought over the counter are classified as food products, as long as they have no medicinal claims. They are not to be recommended as there is poor quality control for food products and surveys have shown that the vast majority are either adulterated or have no active markers. Some countries use registers to identify OTC herbal medicines appropriate to recommend, such as the UK's MHRA's THR (Traditional Herbal Registration) registration https://www.gov.uk/government/publications/herbal-medicinesgranted-a-traditional-herbal-registration-thr/herbal-medicines-granted-a-traditional-herbal-registration. Medical herbalists, however, have access to practitioner-only herbal medicines from trusted suppliers with GMP or higher manufacturing standards.

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