

The Demise of Chlorophyll and A Fresh Look At Wheatgrass Therapy

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Introduction

Several years ago, a simple clinical observation changed significantly the way I practice medicine. Application of a cereal-based extract to a painful, thickly crusted varicose ulcer that rendered it pain-free, completely debrided and sealed by what appeared to be a layer of re-epithelialisation within 24 hours was the only healing phenomenon I had ever seen in 20 years of medical practice. This was the first of many such phenomena that would demonstrate to me how the body can heal itself quickly by facilitation of the body's natural healing mechanisms rather than by intervention. I would also come to question some of the conventional etiological paradigms I studied in medical school such as plantar fasciitis and anal fissure. Ultimately, I would derive a great sense of fulfillment as a doctor by healing many of my patients using a safe, inexpensive, ubiquitous healing agent – wheatgrass.

Convinced I had made an important medical discovery, I began observing and recording numerous healing phenomena as my experience with the extract broadened. Every day I would go to work with an enthusiasm I had never felt before; in anticipation of more opportunities to use the extract. At night I would return home and regale my wife with more amazing anecdotes about wheatgrass healing.

Previously a hardened anti-"alternative" practitioner, this about-face came at a most appropriate time in my life. After twenty years as a GP, I was disillusioned and bored. This was largely because I had been unable to satisfy the dream that first attracted me to medicine – to heal my patients. But the tools of trade just didn't seem to be there. The drugs we used often had minimal therapeutic impact and/or caused undesirable side effects. For instance, what pharmaceuticals can heal or alleviate an exquisitely painful pulled muscle? Or relieve pain and prevent infection in a burn? Or heal anal fissure or plantar fasciitis, or repair atrophic skin changes after long term steroid (ab)use? Nowadays, thanks to wheatgrass, I can often achieve excellent outcomes in all these conditions. Of course, I still use standard pharmaceuticals when necessary – steroids, antibacterials, NSAIDS etc., but far less frequently than I used to. For instance, the strongest topical steroid I use now is 1% hydrocortisone. Wheatgrass does the rest.

Not long after I made my first wheatgrass "discovery", I chanced upon a book, "Cereal Grass. What's in it for you?" by Ron Seibold, a rural sociologist. I discovered many of my observations had already been recorded and there was a lot of science to back them up! I also learned that interest in various forms of wheatgrass - freshly juiced, powdered, freeze-dried - as a nutritional "healing" substance was enormous in the United States in the 1940's. In fact, packaged wheatgrass was the highest selling nutritional supplement in the US and Canada at that time. Then along came the vitamin pill which signalled the deathknell of freshly juiced wheatgrass. Green, not-so-palatable wheatgrass powder that needed mixing with water gave way to the convenience of popping a pill and, as we know, the idea caught on. Now, years later, the wheel has turned, and wheatgrass is once again moving to the top of the nutritional tree. Fresh juice shops selling wheatgrass and other products are booming worldwide. The accent is on good health via good nutrition, but to the detriment of practitioners and patients alike, the direct therapeutic benefits of wheatgrass, both topical and systemic have been largely overlooked. Considering there are so many areas where the herb can be used effectively as a therapeutic agent, this is regrettable. In my case as a hands-on practitioner, I would be hard pressed to practice medicine

without it. Also, in these days of increasing medical fees and costs, topical wheatgrass offers many patients an effective, safe alternative that can be self-administered and used indefinitely. No prescription required.

Chlorophyll – Healing or Humbug?

Since the 1930's, the fresh juice squeezed from wheatgrass, ('liquid sunlight' to some), has been attributed with a plethora of healing powers and properties, many of which I have observed in clinical practice. Many if not most of these effects have been attributed to chlorophyll. In any book about wheatgrass or the cereal grasses (there are many), chlorophyll invariably takes pride of place as *the* wheatgrass healer. There are claims of successful treatment of sinusitis, osteomyelitis, pyorrhea, peritonitis, gastric ulcers, anemia, arteriosclerosis and depression. Then there is an oft quoted American Journal of Surgery (1940) article that reported 1,200 cases ranging from deep internal infections such as brain abscess, peritonitis and skin disorders had been treated with chlorophyll (from wheatgrass) and were 'discharged as cured'. A number of these claims have been substantiated by clinical trials.

Ann Wigmore (1909-94), a lay healer who, in the US, led the wheatgrass juicing craze in the 40's, resorted to using wheatgrass enemas as a means of "cleansing" the body, and her followers continue the same treatment to this day. She also claimed cures for almost everything including cancer. In 1988, the Massachusetts Attorney General sued her for claiming that her "energy enzyme soup" could cure AIDS. She had earlier received a rap over the knuckles for claiming that fresh wheatgrass juice could reduce or eliminate the need for insulin in diabetics, and could obviate the need for routine immunization in children. Curing cancer is a far cry from healing wounds, burns and fractures, which wheatgrass does well, but in my experience, there is an element of truth in what she said. Not cancer cure, but amelioration of symptoms, less enervation (for a while) and in particular, reduced adverse effects from chemotherapy. Wigmore was, I think, on the right track, but probably for the wrong reasons. After all, her "soup" may well have been a valid therapy or preventative for some types of cancer. To quote biochemist Michael Onkin, "the presence of chlorophyll in the human diet has been shown to have beneficial effects, specifically because it is not absorbed. Experiments using Chlorophyllin (CHL), a solubilized form of chlorophyll, have demonstrated that chlorophyll can help to prevent liver and colon cancers by binding carcinogens commonly associated with these cancers and preventing their absorption by the intestines. So, eating foods containing a lot of chlorophyll should be part of a healthy diet, but not because the chlorophyll somehow alleviates anemia. In that chlorophyll, although not absorbed through the gut wall, can prevent some carcinogens entering the systemic circulation."

In another article by researchers W.R. Bidlack and M.S. Meskin in "Nutritional quackery: selling health misinformation," Calif Pharmacist 1989; 36: (8):34+, they state "chlorophyll is not absorbed" That is, not absorbed through the gut wall and, one would expect, far less likely through the skin. It is therefore most unlikely that chlorophyll brings about the numerous and often rapid healing processes I have observed topically and systemically, using an *extract* of wheatgrass in which *chlorophyll is barely detectable*.

The Grass Juice Factor and Immunomodulation

In the 1940's, when wheatgrass was being intensively analysed, an important component unrelated to nutrition was discovered. This was the water soluble Grass Juice Factor (GJF). Although its exact nature has yet to be determined, it is known to be a powerful growth and fertility factor that also leads to greatly improved health in test animals.

From available research and my own broad clinical experience using wheatgrass extract in

thousands of patients, GJF appears to be a very resilient molecule or group of molecules. It is known to exist in many green plants including cereals which contain the highest concentrations of the factor. It appears to be a powerful, effective healing agent that somehow stimulates the immune system both topically and systemically to assist wound healing, hemostasis, anti-bacterial, anti-inflammatory and other effects. It possibly functions as a topical and systemic *immunomodulator*. It can act quickly, sometimes instantaneously, and can produce phenomena that one is not normally exposed to in clinical practice. These phenomena suggest the existence of so far undiscovered alternative biochemical and/or immunological mechanisms and pathways.

Returning for a moment to the chlorophyll discussion, where chlorophyll degenerates after juicing and is not absorbed, the grass juice factor appears to be absorbed and to retain its stability and efficacy for years – perhaps indefinitely. That is, grass juice factor *without* chlorophyll is a healing agent. However, because the two substances are inseparable except by degradation of chlorophyll, it is not possible to have chlorophyll *without* the grass juice factor also being present. In other words the factor is *always* present, but *chlorophyll is not*. Therefore, in my view it is most likely that the grass juice factor is the actual healing agent.

The following are some personal clinical observations that may support my view of wheatgrass as immunomodulator:

A thin membranous re-epithelialisation forms over open wounds and burns usually within 24 hours of application that seals the wound and appears to protect it from contamination. Also, infection rates are low or non-existent suggesting an enhanced immune response.

Some viral infections can be strongly suppressed by the wheatgrass extract. e.g. in the early stages of herpes zoster and primary herpes simplex. Molluscum contagiosum can usually be eliminated in a few weeks. In infectious mononucleosis numerous patients recovered completely within 2 or 3 days of commencement of treatment providing it was instituted early in the disease.

Solar keratoses and basal cell carcinomas tend to gradually recede and disappear over several weeks or months with regular application suggesting tumour necrosis factor activity.

Chronically inflamed, stiff osteoarthritic joints can regain some mobility apparently by relaxation of joint stiffness through softening and increased flexibility of connective tissue around the affected joint.

In Raynaud's Disease, rapid vasodilatation can occur in *both* hands soon after application of the extract to *one* hand, (?neurohumoral pathway) whereas vasoconstriction can occur when applied to chilblains.

The extract can be hemostatic in a bleeding wound and later hemolysing clot in the same wound, leaving it clean and edema-free.

Wheatgrass can eliminate plaque, scaling and itch in psoriasis – an autoimmune condition.

Clinical Applications

In general practice, wheatgrass can often solve problems where there is no equivalent pharmaceutical alternative. For example, a small boy with a split in his foreskin that brings on tears every time he urinates. A small problem, but attendant expectations from mother

nonetheless. In the past I would have recommended an emollient or perhaps hydrocortisone cream knowing it would most likely not heal the lesion. What pharmaceutical is there that actively *heals* damaged or broken skin? In this case, application of a smidgen of wheatgrass cream healed the lesion by the next day.

The following clinical case histories serve to illustrate the therapeutic potency of wheatgrass extract.

Eczema

I have weaned hundreds of chronic eczema sufferers off topical steroids and even stronger immunosuppressants such as azathioprine and cyclosporins by using simple preventive measures and the wheatgrass extract. If, as I have suggested, wheatgrass acts as a topical immunomodulator – and works, then it follows that there is possibly a significant autoimmune component to eczema.

A young female patient, (her mother and sister as well), suffered severe, atopic, steroid-dependent eczema since birth. Nothing has ever given lasting relief or control of symptoms. However, all three have enjoyed complete remission for more than a year since regular daily application of the wheatgrass extract. If eczema is purely genetic in nature, then why have these individuals recovered (I don't mean "cured") from their lifelong disorder? Genetic predisposition, yes – but with an autoimmune skew perhaps?

Fracture Healing

A nine year old suffered a moderately displaced supracondylar fracture. Following reduction and immobilisation wheatgrass spray and cream were applied frequently over and around the exposed elbow. The child suffered *no pain*. At day five, swelling and bruising was minimal.

Clinically, wheatgrass slows and/or stops cutaneous and subcutaneous bleeding. I have seen this many times. Pain reduction is usually very effective, perhaps via Substance P inhibition.

The Socio-Economic Impact of Burns

An 18 year old university student spilt boiling soup over her right hand working in a restaurant. Apart from pain, her final examinations are imminent (she's right-handed), she is facing eviction for overdue rent and she's broke. Her employer has to find a replacement and faces an increased workers' compensation premium. The burn looks bad. At first blush it's at least second degree, and the whole palm is affected. At a guess, two to three weeks off work. Painful, time-consuming removal of daily dressings, wound debridement, pain management, infection risk, possible allergic reaction from antibiotic creams that do little to heal and an insoluble social problem are some of the things that cross my mind.

I applied wheatgrass cream under a Melolin dressing and bandage and gave her a strong analgesic, telling her she would probably be able to return to work in the morning. She looked at me with disbelief. Next morning, smiling and minus the bandage, there was full range of pain-free movement of the hand and fingers, and no palpable tenderness, blistering or broken skin. The palm was mildly red. No antibiotics required. She returned to work and sat her exams on time. Employer and landlord both happy.

Wheatgrass eases pain, prevents fluid and protein loss from the burn by rapidly re-epithelialising the wound surface (this is clearly visible) and appears to strengthen local immunity subsequently preventing infection. Since I began using the extract, I have not experienced an infected burn, nor have I had to use topical or systemic antibiotics. If the wheatgrass extract was made available in hospital emergency departments and ambulances, perhaps lives could be saved.

Plantar Fasciitis

Having observed some rather startling results where patients had recovered, (in some cases in a

few days), from chronic, severely painful and disabling plantar fasciitis, I decided to run a small pilot study on the internet. 31 PF sufferers recruited from the United States applied a wheatgrass-based cream on their heels daily for a period of three months. Around 65 percent of them had significant pain relief, and some enjoyed complete resolution of symptoms. (See my website for details) Currently an Australian university is performing a controlled double-blind trial on 80 participants based on my results. Needless to say, I don't inject steroids into patients' heels any more! Of course wheatgrass doesn't work every time, but it's safe and therefore worth trying first.

The rapid response of some patients to wheatgrass raises the question of the etiology of PF i.e. it is of biomechanical origin. If such is the case, then how do some chronic sufferers recover so quickly using wheatgrass? Perhaps PF is primarily an autoimmune condition that is eased by wheatgrass immunomodulation and *aggravated* by biomechanical factors.

Anal Fissure – Another Autoimmune Condition?

A young woman requested "a laxative that works please doctor" for constipation she'd had for seven years. She had one or two bowel actions a week and, in her native country, had blood tests and an MRI that revealed constipation. She had taken laxatives daily since onset of symptoms. She denied ever being examined for anal fissure. When I explained that constipation can be caused by anal fissure, she conceded to physical examination which revealed a large, chronic, posterior fissure guarded by a sentinel pile. Within a week, the fissure had almost healed and the constipation resolved.

If I had not seen so many patients with anal fissure (and constipation) heal so rapidly with wheatgrass, I would never have thought of the fissure actually causing the constipation. I would also not have examined the anal canal of numerous constipated patients who, once their fissure was treated, enjoyed complete recovery. So if wheatgrass has immunomodulatory properties and heals fissures, it may follow that anal fissure is autoimmune. The anal verge breaks down (for whatever reason – non-constipated babies are sometimes born with the condition), the anal sphincter then contracts reflexly in response to pending bowel actions and constipation develops. So if you fix the fissure you can cure the constipation.

Wheatgrass as Anti-inflammatory - Acute Otitis

A 6 year old, hot, miserable, sleepless, crying and holding his ear had been in pain for three days with no response to paracetamol. Examination revealed a red, glowing, blistered eardrum of bullous tympanitis. With mother's permission, I put a few drops of wheatgrass extract into his ear. About ten minutes later, the boy had fallen asleep! When he awoke, his pain had all but disappeared. The day, there was no blistering inflammation had all but resolved.

As we know, there is very little if anything the pharmaceutical industry has to offer for otitis. But in wheatgrass, we have a simple herbal remedy that is highly effective, very safe and free of adverse effects.

Conclusion

It took a lot to turn my head away from pharmaceuticals and move outside the orthodox medical square. Wheatgrass had the therapeutic power to do that, restored my faith in medicine and improved the quality of life for many of my patients. Although prescription medications are still an important part of my armamentarium, I use them much less now than I used to. And when one derives the satisfaction and enjoyment seeing patients recover using a simple herbal extract, it is quite gratifying.

In these days of "evidence-based" medicine, we tend to forget that medicine is more art than science. Wheatgrass helps put a lot of that art back into medicine – and heals at the same time.

