Psoriasis is an extremely common, noncontagious skin disorder affecting between 2% to 4% of the United States population. Psoriasis affects men and women equally, with the mean age of onset being 28. However, it is not uncommon for children to develop psoriasis. Two percent of children by the age of 2 years of age will present with psoriasis usually located in the elbows and will move to the crease of the arms if not corrected.

Psoriasis is a classic example of a hyperproliferative skin disorder. Other hyperproliferative skin disorders include basal cell carcinoma, malignant melanoma, squamous cell carcinoma, actinik keratosis, Bowen's Disease, papilloma, seborrheic keratosis, toxic eczema, allergic eczema, atopic dermatitis, and ichthyosis. The rate of cellular skin division in psoriatic lesions is very high (1,000 times greater than in normal skin), exceeding the rate in squamous cell carcinoma. Even in uninvolved skin, the number of proliferating cells is up to two and one-half times greater than in non-psoriatics.

The hyperproliferation of skin cell reproduction causes raised red, dry, flakey patches of thickened skin. Psoriasis commonly affects the skin of the elbows, knees, genitals, and scalp. Some people have worsening of their symptoms in the colder winter months with improvement noted when the lesions are exposed to sunlight.

There are several different types of psoriasis including:

**Psoriasis vulgaris** (common type), **Guttate psoriasis** (small, drop like spots), **Inverse psoriasis** (in the folds like of the underarms, navel, and buttocks), commonly seen in obesity, **Pustular psoriasis** (liquid-filled yellowish small blisters), and **Palmoplantar psoriasis** (affecting primarily the palms and the soles).
Sometimes pulling of one of these small dry white flakes of skin causes a tiny blood spot on the skin. This is medically referred to as a special diagnostic sign in psoriasis called the Auspitz sign.

CAUSES

Thirty six percent of patients have one or more family members with psoriasis reflecting a possible genetic error in mitotic control of normal skin proliferation. The rate at which cells divide is controlled by a delicate balance between two internal control compounds – cyclic AMP and cyclic GMP. Increased levels of cyclic GMP (cGMP) are associated with increased cell proliferation; conversely, increased levels of cyclic AMP (cAMP) are associated with enhanced cell maturation and decreased cell proliferation. Both decreased cAMP and increased cGMP have been measured in the skin of individuals with psoriasis.

Genetic predisposition appears to be the causation of psoriasis; however something must turn the gene on and cause the immune system to be hypervigilant. These factors include certain foods, drugs, environmental allergies, alcohol intake and stress, and any bacterial, viral, or fungal infections that have become systemic.

TREATMENT

In traditional medicine, Psoriasis is considered a non-curable, long-term (chronic) skin condition. This is not the case in naturopathic medicine. Furthermore, the traditional treatment approach runs the risk of substantial side effects, as the aim of this form of treatment is immuno-suppression.

1) **Enbrel** (Entanercept) is classified as a immuno-modulator, specifically a TNF inhibitor which serves to lower the ability of your immune system to fight commonly occurring viral, fungal, or bacterial infections. You should be tested for tuberculosis (TB) before beginning this medication and avoid exposures to potential contagious diseases. Caution is advised in individuals with a prior diagnosis of diabetes. Deaths have been associated with this class of drugs.
2) **Calcineurin inhibitors.** Currently, calcineurin inhibitors (tacrolimus and pimecrolimus) are only approved for the treatment of atopic dermatitis, but studies have shown them to be effective at times in the treatment of psoriasis as well. Calcineurin inhibitors are thought to disrupt the activation of T cells, which in turn reduces inflammation and plaque buildup. The most common side effect is skin irritation. Calcineurin inhibitors are not recommended for long-term or continuous use because of a potential increased risk of skin cancer and lymphoma and are therefore recommended to be used as a second line agent.

3) **Topical corticosteroids.** These powerful anti-inflammatory drugs are the most frequently prescribed medications for treating mild to moderate psoriasis. They slow cell turnover by suppressing the immune system, which reduces inflammation and relieves associated itching. Topical corticosteroids range in strength, from mild to very strong.

4) **Methotrexate.** Taken orally, methotrexate helps psoriasis by decreasing the production of skin cells and suppressing inflammation. It may also slow the progression of psoriatic arthritis in some people. Methotrexate may cause upset stomach, loss of appetite and fatigue. When used for long periods it can cause a number of serious side effects, including severe liver damage and decreased production of red and white blood cells and platelets.

5) **Photochemotherapy, or psoralen plus ultraviolet A (PUVA).** Photochemotherapy involves taking a light-sensitizing medication (psoralen) before exposure to UVA light. UVA light penetrates deeper into the skin than does UVB light, and psoralen makes the skin more responsive to UVA exposure. This more aggressive treatment consistently improves skin and is often used for more severe cases of psoriasis. PUVA involves two or three treatments a week for a prescribed number of weeks. Short-term side effects include nausea, headache, burning and itching. Long-term side effects include dry and wrinkled skin, freckles and increased risk of skin cancer, including melanoma, the most serious form of skin cancer.

**NATUROPATHIC TREATMENT**
Despite the complexity of this disease, the therapeutic approach is fairly straightforward. The overall goal is to calm down the immune system by consuming foods which harmonize with your body. By doing so, this will decrease bowel toxemia, rebalance fatty acid levels and decrease inflammatory processes in the skin. Remember the health of our skin is an outward reflection of the health of your body.

**Diet**

In general, it is best to limit sugar, gluten, meat, animal fats, and alcohol while increasing the intake of dietary fiber and cold water fish. It is crucial to address any food allergies as the manifestation of psoriasis is directly linked to an immune system dysfunction. An easy and scientific way to calm down the body is to follow the Blood Type Diet designed for you which inherently minimizes food allergies. A simple blood draw is all that is necessary to determine your specific blood type and blood markers.

**Supplements**

- High potency multiple vitamin and mineral formula.
- Flaxseed oil – inhibits synthesis of inflammatory leukotrienes from arachidonic acid.
- Vitamin A – often found to be deficient in people with Psoriasis.
- Vitamin E – to help normalize low Glutithione peroxidase levels.
- Chromium – used to counter act the increased serum levels of glucose and insulin in people with psoriasis.
- Selenium – to help normalize low Glutithione Peroxidase levels.
- Zinc – often found to be deficient in people with Psoriasis.
- Water-soluble fiber (psyllium, pectin, guar gum, etc.)

**Botanical Medicine**

There is a wonderful herbal formula blended into a cream base which serves as a great alternative to hydrocortisone. It contains the following three herbs:

**Glycyrrhiza glabra** (licorice root)

The acidic compound in this plant has a similar affect to topical hydrocortisone without the immunosuppressive side effects.
Matricaria chamomilla (chamomile)
Has been used widely in Europe for Psoriasis, eczema, and dry flaky skin. Chamomile has a calming action by decreasing inflammation and systemic allergic responses.

Capsicum frutescens (cayenne pepper)
When applied topically, this plant will initially stimulate pain fibers causing an initial increase in pain however with time, the pain diminishes due to the action of depleting substance P from the pain fiber synapse. Applied frequently, it reduces scaling, skin thickness, redness, and itchiness.

Other herbal options include:

Grindelia Squarrosa (Gum weed)
The flowers and leaves are an effective treatment for nearly all skin disorders. Gumweed is most helpful with minimizing the itch and inflammation.

Jojoba Oil
Historically Jojoba Oil has been used by Native Americans to relieve skin problems. Jojoba Oil makes the skin less acidic. It is high in B vitamins, Vitamin E, silicon, chromium, and iodine.

Berberis aquifolium (Oregon Grape)
The root of this plant is well known for the treatment of skin diseases due to a toxin of infection in the blood. It stimulates the action of the liver to “cleanse” the blood. It is also a mild stimulant for the thyroid. It contains trace minerals of manganese, silicon, sodium, copper, and zinc.

Physical Medicine
• Ultrasound, three times/week, helps to penetrate heat to all the layers of the dermis. This treatment done on a regular basis has shown to decrease T lymphocytes, Langerhan cells, and markers of keratinocyte inflammation.
• Ultraviolet light, aka natural sunlight, three times/week, over a 4 week period demonstrated clearance of symptoms in 84% of patients.
Homeopathy

If you are interested in Naturopathic treatment for Psoriasis or any other ailment, you can contact the clinic or give Dr Ardolf a call at (480) 767-7119.