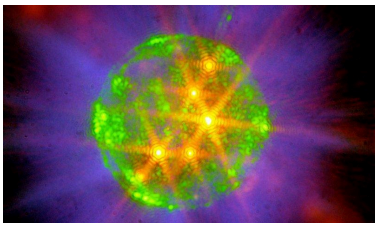
Ultraviolet Blood Irradiation (UVBI)



Ultraviolet Blood Irradiation is a procedure that exposes a small amount of a patient's blood to ultraviolet light outside the body. The blood is then reintroduced to the body with the intent of killing pathogens and stimulating immune responses.

HISTORY

Ultraviolet Blood Irradiation (UVBI) was first developed in the 1920s by Dr. Emmett Knott and engineer Lester Edblom. At the time, it was common to treat tuberculosis patients with 'sun baths' as sunlight was known to kill the bacteria causing illness and believed to improve circulation and boost the immune system. Inspired by this treatment, Dr. Knott wondered what it would look like to get the sunlight 'inside' the patient to affect the bacteria directly. During his early research, he found that exposing a small amount of blood to a controlled amount of UV light and returning it to the body was all that was required to achieve a positive effect on the immune system. By 1928 Knott and Edblom were awarded a US patent for the first UVBI machine called the Knott Hemo-Irradiator.

Starting in the 1930s, the Knott Hemo-Irradiator was used in US hospitals across the country to treat difficult infections and inflammatory conditions that didn't respond to other available treatments. Throughout the 1930s, 1940s, and 1950s this low-cost treatment proved itself to be very effective with mild, temporary side effects if any. Unfortunately, even with overwhelmingly positive results, UVBI fell out of favor in the US as antibiotics gained popularity and became widely available. At the time, many parts of Europe had traditions of using various light therapies. Several countries, particularly the Soviet Union and Germany, continued to research and refine the use of UVBI equipment throughout the 20th century. Because of their work, UVBI is still available today, although it is no longer a mainstream treatment.

UVBI TODAY

The core concept of treating a small sample of blood with UV light and returning it to the body remains unchanged, but the technology has evolved into a cleaner, safer and more controlled procedure than the original machines of the 1930s. Far more precise UV wavelengths are used, contamination risk has been minimized, and dosing has been standardized. Ultraviolet Blood Irradiation (UVBI) has been gaining renewed recognition within the integrative and functional medicine community over the last 10-15 years and is considered an alternative, supportive therapy for many chronic conditions and infections.

WHAT DOES UV LIGHT DO FOR THE BLOOD?

Although UVBI has been used for nearly a century, researchers still don't know the exact mechanism behind its effects. What is understood is that exposing a small amount of blood to UV light seems to create biological signals that the body recognizes that influence immune balance, circulation and microbial activity.

When UV treated blood is returned to the body, it acts as a 'signal carrier'. The immune system recognizes the subtle structural and biochemical changes to the exposed cells as a message to pay attention, improve circulation and encourage the natural healing responses.

Any exposed microbes are broken down making it easier for the normal activity of the immune system to recognize the pathogen and mobilize your innate defenses.

Dr. Abigail Bisson, ND 1540 Commercial St. SE Salem, OR 97302 503-581-6239 doctorbisson.com

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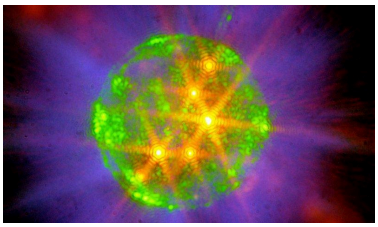

WHAT DO WE TREAT WITH UVBI?

While UVBI can be used as a general support for boosting the immune system, we have used it to support patients who are being treated for:

- Chronic infections (bacterial, viral, or mixed)
- Respiratory infections
- Lyme-related symptoms
- Chronic fatigue or low-energy states
- Immune system dysregulation
- Inflammatory conditions
- Circulatory or microcirculation concerns
- Skin conditions sometimes linked to inflammation
- Adjunct support during recovery from illness
- Detoxification-related protocols
- Autoimmune-related symptom management (as an adjunct, not a treatment)

WHAT IS A TREATMENT LIKE?

A full UVBI treatment takes 45-60 minutes to complete in the clinic.

- Blood draw of 50-70 cc of patient blood.
- Patient blood is added to an IV bag with calcium plus heparin to prevent clotting
- Calcium and ozone are added to the IV bag as supportive therapies.
- Blood is reintroduced to the body as an IV. The tubing goes through the UVBI machine to expose the blood to a mixture of UV lights and full spectrum light if needed before entering the patient.

WHAT ARE THE SIDE EFFECTS?

Most patients tolerate this procedure with minimal side effects.
The most common side effect is general fatigue especially after the first 3-4 treatments.
After further treatments most patients feel energized.

Occasionally a patient will experience bruising or bleeding at IV site insertion.

TREATMENT EXPECTATIONS

Typically, treatment begins with 10 rounds of UVBI at the rate of 2 or 3 per week. Following these initial treatment rounds, additional maintenance rounds may be indicated depending on the conditions being treated and patient response.

SCHECULING

Please contact the front desk for information on cost and scheduling or if you have any questions.

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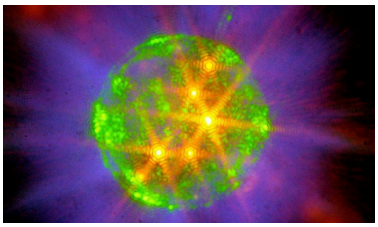

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