



## STUDY OF BILIRUBIN LEVEL IN BLOOD AFTER LEECH THERAPY IN WOUND INFECTION

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**ABSTRACT:** Leech therapy has been administered since ancient times. The popularity of leeching varied immensely over the years especially during the 19th century. Today, leech therapy is used to promote healing in an infected and non-infected wound. It help reduce venous congestion so as aiding plastic surgery as well as reconstructive surgery. Leech therapy is a complementary and alternative therapy known as Hirudotherapy which doesn't hurt and also with minimal adverse effect. The leech's saliva contains enzymes and compounds which possess an anti-inflammatory, anticoagulation and vasodilating effect.

**Key words:** - Medicinal leeches, Bilirubin, wound infection, Hirudotherapy

### INTRODUCTION:

Leech therapy played an important role during the seventeenth and eighteenth centuries, at which time it was used for medicinal "blood-letting" and "purification" - a practice believed to cure a variety of ailments from gout to headaches. In the early 1880s Haycraft first noted the antithrombotic properties of leech saliva and Jacoby discovered the anticoagulant factor in leech saliva and named it hirudin in 1904. (Fields WS 1991) Hirudotherapy re-emerged as an adjunct to plastic, reconstructive, and trauma surgery in the 1970s and 1980s. (Munshietal2008; Durrantetal 2006 de Los Mozos 2007)

Leech therapy is one of the most important and widely practiced methods of treatment used for local evacuation of morbid humours. It is a method of bloodletting which involves the withdrawal of blood in a considerable quantity from the body with the help of medicinal leeches. (Cole D 1985)

Or in other words it is a procedure of treatment through blood sucking process with the help of medicinal leeches for prevention and treatment of various diseases. This therapy has unique features that are easily recognized. It has been used effectively for the management of various

disorders specially skin and musculoskeletal disorders where western medical treatment is of less value.

It may also be used for the restoration of normal health through its prophylactic and palliative action. It may produce better results either singly or as an adjuvant with drug therapy in diseases like hypertension, thrombosis, atherosclerosis, arthritis, varicose veins, frostbite, skin diseases like dermatophytosis, psoriasis, eczema, vitiligo and in various surgical and traumatic conditions such as re-attachment of severed extremities, fingers, toes and ears. (Weinfeldetal 2001)

There are several types of wounds, such as surgical, traumatic, and chronic. Two categories of wounds exist, namely, partial and full thickness. Full-thickness wounds involve a loss of deeper layers of skin and fat; they disrupt the blood vessels and produce a scar when healed. (Sussman2011). Wound-care treatments are debridement, alleviation of weight-bearing wounds, compression therapy, antibiotics, hyperbaric oxygen therapy, whirlpool therapy, ultrasound treatment, electrical stimulation, and magnetic therapy. There are also many wound-care products such as alginates, antimicrobials, and hydrogels. Sussman C 2011 .Wound healing immediately