

# An Overview of Low Vacuum Applications in the Field of Biology with an Emphasis on Wound Healing

Jalil Badraghi <sup>1</sup>, Elaheh Pourfakhraei <sup>1</sup>, Saboura Ashkevarian <sup>1</sup>, Fatemeh Mamashli <sup>1</sup>

*1. Research Institute of Applied Sciences, ACECR, Shahid Beheshti University, Tehran, Iran*

Corresponding Author: Jalil Badraghi, E-mail: badraghi@acecr.ac.ir

## ABSTRACT

Many of the human societies (about 1%) have some problems about wound. wound healing always is a concern for human and many economic and social costs has imposed in human society. Regardless of the source and cause of wound, principally if other factors such as diabetes and wound infection is higher, it will be difficult healing. Wound healing is often painful and unpleasant for patients. From the 1990s until today, a process called vacuum treatment for treatment of wounds used in lower pressures by doctors and experts all over the world and over time has expanded considerably. Most of the researches were on the effectiveness of the treatment of wounds such as diabetic foot wounds and burns, bed sores, venous and arterial wounds, and radiation wounds. The study also found lower costs in the long-term for society in compare with other new method. Until 1388, the treatment method was not used in Iran. Search in different databases as vacuum therapy and same subject shows the number of papers published in scientific journals on the treatment each year is a significant increase over the previous year. But there are a few articles by Iran's addresses. It can conclude that Iran, despite the development of this method in some countries, not only vacuum therapy isn't using even research on treatment with vacuum is very limit. So, the purpose of this paper is to introduce vacuum therapy and its effect on faster wound healing, useful support can accelerate and reduce pain for patients.