

# **Wound Healing**

## What is a wound?

A wound is any damage or break in the surface of the skin. Types of wounds

- Acute wounds that can include minor cuts, lacerations, bites, abrasions and surgical wounds.
- Chronic wounds that can become slow to heal including ulcers on the legs and feet.

#### Signs & Symptoms

Some wounds can become easily infected. Signs of an infected wound are:

• Pain

- Swelling
- Heat
- Redness
- wound drainage or pus
- odour
- Fever.

# Causes

Wound causes can be internal or external in origin. Wounds of internal origin are mainly due to impaired circulation, neuropathy or medical illness. Wounds of external origin are due to an outside force or trauma that causes open or closed wounds.

# **Internal Wounds**

Disturbance of the different regulating systems of the human body can lead to wound formation, and may include the following:

- Impaired circulation: This can be from either ischemia or stasis. Ischemia is the result of reduced blood supply caused by the narrowing or blockage of blood vessels, which leads to poor circulation. Stasis is caused by immobilization (or difficulty moving) for long periods or failure of the regulating valves in the veins, which leads to blood pooling and failing to flow normally to the heart.
- Neuropathy: This is seen mostly in cases of prolonged uncontrolled diabetes mellitus, where high blood sugars, derivative proteins and metabolites accumulate and damage the nervous system. The patients are usually unaware of any trauma or wounds, mainly due to loss of sensation in the affected area.
- Medical illness: When chronic and uncontrolled for long periods (such as hypertension, hyperlipidemia, arthrosclerosis, diabetes mellitus, AIDS, malignancy, morbid obesity, hepatitis C virus, etc.), medical illnesses can lead to impairment of the immune system functions, diminishing the circulation and damaging other organs and systems.

#### **External Wounds**

External wounds can either be open or closed. In cases of closed wounds, the skin is intact and the underlying tissue is affected but not directly exposed to the outside environment. The following are the most common types of closed wounds:

- **Contusions**: These are a common type of sports injury, where a direct blunt trauma can damage the small blood vessels and capillaries, muscles and underlying tissue, as well the internal organs or bone. Contusions present as a painful bruise with reddish to bluish discoloration that spreads over the injured area of skin.
- Hematomas: These include any injury that damages the small blood vessels and capillaries resulting in blood collecting and pooling in a limited space. Hematomas typically present as a painful, spongy rubbery lump-like lesion. Depending on the severity and site of the trauama, hematomas can be small or large, deep inside the body or just under the skin.
- **Crush injuries:** These are usually caused by an external high-pressure force that squeezes part of the body between two surfaces. The degree of injury can range from a minor bruise to a complete destruction of the crushed area of the body, depending on the site, size, duration and power of the trauma.

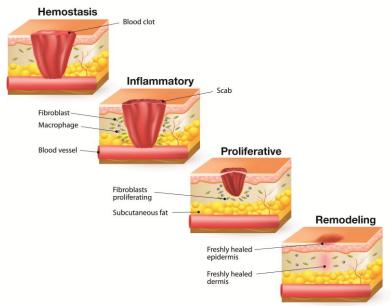
# Benefit of SGS Therapy

- Provide the complete Nourishment with the blood circulation covering entire affected area of wound
- Regulates the general as well as cellular metabolism
- Maintains at the highest possible level of homeostatic as it is mostly required for internal as well as external wound healing.

## Suggested Products:

SH&WK: OmegaSat: 1 soft gel 2 Times after meal

Minerjal: 7 drops 4 times in 200 ml drinking water Alproxy: 1 tab 3 times after meal



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