

## **Effects of Topical Nigella Sativa Extract on Healing of Split Thickness Wound in Rats**

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### **Abstract**

#### **Background:**

Black seed is one of the medicinal plants with a variety of advantages that have been known and used in various parts of the world. The content of the crude extract of Nigella sativa seeds, in particular thymoquinone, has been shown to have potential pharmacological such as antioxidant, antitumor, antiparasitic, antiinflammatory.

#### **Objective:**

The aim of this study is to examine the effect of topical nigella sativa topical application on full thickness wound healing.

#### **Method :**

A prospective experimental study carried out on 12 male rats at about 3 months old. Two full thickness skin graft donor sites were made on the back in each animal, one control, and the other in which topical nigella sativa topical was applied. Skin specimens were collected on the 3<sup>rd</sup> and 10<sup>th</sup> days from 6 different rats at each period. The sections were stained with mason trichrome for examining the number of collagen thickness and size of the wounds were measured by using Visitrax.

#### **Results :**

Application of topical nigella sativa shortens the inflammatory phase and proliferative phase, increases epithelialization and collagen thickness.

#### **Keywords :**

Nigella sativa topical, wound healing, collagen