

AMJ

ISSN: 0005-2523

ISSN: 0005-2523

Volume 62, Issue 04, June, 2022

**Clinical and anti-inflammatory effects of fresh and
Commercial *Aloe Vera* Gel on IL-6 levels in Oral
Mucosal Burns induced in Rabbits**

ABSTRACT

Aloe Vera is a vitamin and mineral-rich plant with numerous health and skin-care applications. The study's goal is to determine how *Aloe Vera* affects IL-6 levels in an adult male New Zealand rabbit. In this experiment, 48 male New Zealand rabbits were used. In each rabbit, ketamine and xylazine were administered intramuscularly into the thigh muscle. In less than 5 minutes, an appropriate level of anesthesia was established. In the operating room, animals were placed on the operating table. For unipolar cauterization, electrosurgical generator cautery was used throughout the procedure. We burned 0.5 cm of the rabbits' buccal oral mucosa with a unipolar electrocautery pen with a (2.5) inch standard blade electrode at 95.5 C°. After that, the rabbits were placed into four groups, each with 12 rabbits: Group 1 (normal oral mucosa without burning), Group 2 (burning oral mucosa without medicine), Group 3 (*Aloe Vera* plant/fresh gel), and Group 4 (*Aloe Vera* /commercial gel). Each group's animals were euthanized on days three (3), seven (7), and fourteen (14) of the trial, resulting in a total of 12 rabbits slaughtered during each medication period. The level of IL6 in serum was determined using blood and buccal tissue samples. The untreated burn site had the greatest amount of IL-6 throughout the experiment, while the burn site treated with *Aloe Vera* gel had the lowest level of IL-6. Fresh *Aloe Vera* gel and commercial *Aloe Vera* gel are thought to have a significant anti-inflammatory impact by lowering the amount of inflammatory mediator (IL-6) and so promoting wound healing.