

## EFFICACY OF 578 NM COPPER BROMIDE LASER IN PREVENTING SCAR FORMATION OF CESAREAN SECTION WOUNDS

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### ARTICLE HISTORY

**Received:** 14 March 2025

**Revised:** 28 March 2025

**Published:** 8 April 2025

### ABSTRACT

This study aimed to evaluate the efficacy of the 578 nm copper bromide laser in preventing scar formation following cesarean section compared to non-laser treatment. The study found that areas treated with the laser showed a 77% improvement in the total Vancouver Scar Scale (VSS) score between the first treatment and the final assessment, while the control areas improved by only 15.1%. Additionally, scars treated with the laser had an average cosmetic appearance score 2.69 points higher than those in the control group.

When analyzing individual VSS parameters, significant improvements were observed in vascular density and scar pliability. No adverse effects were reported during the study. The 578 nm copper bromide laser is a safe and effective treatment for improving the quality and cosmetic appearance of surgical scars in individuals with Fitzpatrick skin types III–IV. It is recommended to initiate treatment within seven days after wound suturing for optimal results.

**Keywords:** Copper bromide laser, Vancouver scar scale, Cosmetic appearance scale, Cesarean section wounds, Scars

**CITATION INFORMATION:** Kaewkes, A., Naphapunsakul, S., (2025). The Efficacy of 578 nm Copper Bromide Laser in Preventing Scar Formation of Cesarean Section Wounds. *Procedia of Multidisciplinary Research*, 3(4), 21

**Data Availability Statement:** The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

**Conflicts of Interest:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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