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## Fractional laser as laser assisted drug delivery of Triamcinolone acetonide in keloids

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**K**eloid is benign hyperplasia of dermal collagen which may or may not be preceded by injury in susceptible person. Keloids are refractory to treatment most of the times. Intralesional corticosteroid, topical retinoic acid, topical imiquimod cream, surgery, cryotherapy, laser and silicon sheeting are mainly used for treatment. Fractional ablative laser is a new laser treatment modality that create numerous microscopic thermal injury zone controlled width, depth and density that are surrounded by a reservoir of spared epidermal and dermal tissue, allowing of rapid repair of laser-induced thermal injury. Multiple studies demonstrate that laser pretreatment of the skin can increase the permeability and depth of penetration of topical drug molecule. Laser assisted drug delivery is an evolving technology with potentially broad clinical application. Ablative fractional laser treatment creates vertical channels that might assist the delivery of drug into skin. Combination same-session therapy with ablative fractional laser and triamcinolone acetonide offers a good combination caused assisted delivery of drug. We reported a case of keloid in child who previously had burn wound in his left arm, 14 months ago. The lesion improved in reduction of keloid size and Vancouver Scar Scale (VSS) after therapy with fractional ablative laser followed by triamcinolone acetonide application. Fractional ablative laser mediates the delivery of drugs through the microthermal zone. In this particular case, fractional ablative laser followed by triamcinolone acetonide application is well tolerated with no apparent side effects. Further studies are needed to determine the drug delivery efficacy in fractional ablative laser therapy.

### Biography

Zahra Ayu Lukita Sari has completed her Medical degree from Sriwijaya University, School of Medicine. Presently, she is a student in Dermatology & Venereology, Sriwijaya University School of Medicine.

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