

Implementation of Tissue Engineering Technique to Nursing of Unhealed Diabetic Foot Lesion

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Abstract : Introduction: Diabetic wound risks limb amputation, and the healing remains challenging. Chronic Hyperglycemia caused the insufficient inflammatory response and impaired ability of the cells to regenerate. Tissue Engineering Technique is mandatory. Methods: Tissue engineering (TE)-based therapy Utilizing mononuclear cells, plasma rich platelets, and collagen applied on the damaged tissue Results: TE technique resulting in acceptable outcomes. The wound healed completely in 2 months. No adverse effects. No allergic reaction. No morbidity and mortality Discussion: TE-based therapy utilizing mononuclear cells, plasma rich platelets, and collagen are safe and comfortable to fix damaged tissues. These components stop the chronic inflammatory process and increase cells' ability for regeneration and restoration of damaged tissues. Both of these allow the wound to regenerate and heal. Conclusion: TE-based therapy is safe and effectively treats unhealed diabetic lesion.

Keywords : diabetic foot lesion, tissue engineering technique, wound healing, stemcells

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