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<u>Mechanistic insight into diabetic wounds: Pathogenesis, molecular targets and treatment strategies to pace wound healing.</u>

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Abstract

Wound management in diabetic patient is of an extreme clinical and social concern. The delayed and impaired healing makes it more critical for research focus. The research on impaired healing process is proceeding hastily evident by new therapeutic approaches other than conventional such as single growth factor, dual growth factor, skin substitutes, cytokine stimulators, cytokine inhibitors, matrix metalloproteinase inhibitors, gene and stem cell therapy, extracellular matrix and angiogenesis stimulators. Although numerous studies are available that support delayed wound healing in diabetes but detailed mechanistic insight including factors involved and their role still needs to be revealed. This review mainly focuses on the molecular cascades of cytokines (with growth factors) and erstwhile factors responsible for delayed wound healing, molecular targets and recent advancements in complete healing and its cure. Present article briefed recent pioneering information on possible molecular targets and treatment strategies including clinical trials to clinicians and researchers working in similar area.

KEYWORDS: Compromised wounds; Diabetes; Diabetic foot ulcer; Diabetic wounds; Growth factor; Wound healing

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