Phytochemical extracts of triphala in peri implant diseases- An alternate medicine

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Introduction: Rehabilitation of oral cavity with Dental Implants is a common practise but the loss of bone around the dental implants may occur in the course of osseointegration or even after a successful osseointegration after many years. Though Chemical-mechanical therapy have been effective methods of treating Peri implant diseases, the recent evidences like resistance of microorganism to synthetic drugs have led to development of Alternative Medicine in the field of oral therapeutics.

Methodology: Extracts of Triphala are rich in phytochemicals like Chebulagic Acid, Chebulinic Acid and Gallic acid has proven to have various biological activities such as anti-viral, anti-bacterial, anti-allergic and antimutagenic with very good immunomodulatory properties. Chebulagic acid inhibits pro-inflammatory pathways mediated by Nuclear Factor-κB, tumour necrosis factor α (TNF-α), and cyclooxygenase-2 (COX-2), moreover it increases vascular endothelial growth factor (VEGF) mediated angiogenesis. Triphala Extracts also showed increased proliferation of keratinocytes and controlled fibroblasts thus influencing alveolar bone metabolism. Gallic acid which is a potential blocker of T-lymphocyte mediated cytotoxicity which blocks the major immune controlling inflammation.

Conclusion: Extracts of Triphala as proven to reduce plaque accumulation over the dental implants, it not only inhibits breakdown collagen matrix by inhibition of specific Matrix Metalloproteinases but also enhances Osteogenic Potential in general. Number of In vitro and In vivo researches have shown Triphala to be an effective alternate medicine in treatment of Peri Implantitis however further human trials are required to
confirm the efficacy of these phytochemical extracts against the synthetic formulations
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