

ABSTRACT

BACKGROUND: Healing of the extracted socket commonly results in osseous deformities. One of the recent approaches in preserving the extracted socket is the use of autogenous dentine graft material. Autogenous dentine graft revolutionizes discarded biomedical waste into a novel bone graft material and eliminates the use of commercial bone graft material.

AIM: To evaluate the clinical and radiological effectiveness of autogenous dentin graft in preserving the extracted alveolar socket.

MATERIALS AND METHODS: A total number of 10 vital tooth indicated for extraction in 10 systemically healthy patients were selected randomly for the purpose of the study. After atraumatic extraction, the extracted sockets were treated with autogenous dentine graft prepared from the extracted tooth. Clinical parameters such as socket width and radiographic analysis CBCT were recorded at baseline and 6 months post-operatively.

RESULTS: The soft tissue ridge width, radiographic crest width, width at 5mm 10mm from crest and socket height between pre-operative and post-operative analysis was statistically significant. ($p=0.000$, $p=0.000$, $p=0.000$, $p=0.000$, $p=0.003$).

CONCLUSION: Within the limits of present study, socket preservation using autogenous dentine graft offers many advantages for patients and the clinician. However, careful patient selection and treatment planning appears to be of critical importance in achieving a predictable outcome. Further randomized clinical trials are needed to monitoring soft tissue dynamics & hard tissue changes and histological observations are required to establish its regenerative potential in various field of application.

KEY WORDS: Socket preservation, autogenous dentine graft, alveolar ridge preservation.