



**“EVALUATION OF CLINICAL PERFORMANCE OF  
SOCKET-SHIELD TECHNIQUE IN FIXED  
PROSTHODONTICS – AN INVIVO STUDY”**

By

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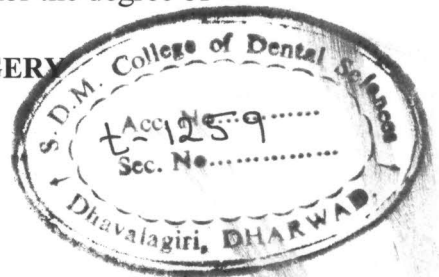
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## **ABSTRACT**

**Title:** Evaluation of clinical performance of socket shield technique in fixed prosthodontics

- An in vivo study.

### **Background and Objectives:**

When teeth are extracted, the post-extraction site undergoes alveolar bone resorption. Post-extraction healing of hard and soft tissues proceeds predictably i.e., there is foremost collapse of bony architecture, soft tissues like interdental papilla, marginal gingiva in relation to pontic site, resulting in poor esthetic restoration of the pontic site. In Socket shield technique, tooth root itself acts as a safeguard (like a shield) in maintaining the bucco-alveolar bone architecture and bundle bone-periodontal ligament attachment, this helps to preserve facial soft tissue contours and interdental papillae. Long term clinical evidence to determine the outcome of fixed partial denture in combination with socket shield technique had not been proved. Therefore this study was aimed to assess the clinical and radiographic outcome of socket shield technique in fixed partial denture restorations.

### **Materials and Methods:**

This study was performed among 24 patients reported to the OPD of Department of Prosthodontics with chief complaint of single missing teeth. 12 samples were considered as test group and rest 12 samples from control group. In samples under test group, socket shield technique was performed whereas in control group samples, atraumatic extraction of broken or damaged tooth was performed. Assessments like esthetic outcome by using Pink Esthetic Scoring criteria, Cver and Ryge criteria for restoration assessment, keratinized tissue, volumetric analysis using casts.

### **Results:**

The values obtained under PES found to show statistically significant difference between the test group and control group. Apart from the volumetric assessment and cast assessment found to be favorable for test group than control group.

### **Interpretation and Conclusion:**

Within the limitations of this study, it was concluded that Socket shield technique is a unique technique to preserve the buccal bone from clinical aspect as well as radiographic aspect in fixed partial denture.

### **Key words:**

Socket shield; Atraumatic extraction; PES; Volumetric assessment and Cast assessment.