# Orthodontic Miniscrew Implants: Clinical Applications

Paik, Cheol-Ho


## Table of Contents

1. **INTRODUCTION**
   - Case example
   - About this book

2. **BRIEF REVIEW OF THE USE OF IMPLANTS IN ORTHODONTICS**
   - Early research and development
   - Later developments
   - Miniscrews
   - Terminology

3. **MINISCREW IMPLANTS: CONCEPTS AND CONTROVERSIES**
   - Method of insertion: drill-free versus pre-drilling
   - Primary stability: osseointegration versus mechanical interlocking
   - Timing of loading: immediate versus delayed loading
   - Loading characteristics and implant stability
   - Secondary stability: bone remodeling around the miniscrew implant
   - Miniscrew implant design and insertion and removal torque

4. **TERMINOLOGY, DESIGN FEATURES AND ARMAMENTARIUM**
   - Terminology and design features
   - Armamentarium

5. **ANATOMIC CONSIDERATIONS AND PLACEMENT/REMOVAL OF ORTHODONTIC MINISCREW IMPLANTS**
   - Anatomic considerations
   - Miniscrew implant placement and removal
   - Post-placement instructions for the patient
   - Timing of initial force application

6. **MINISCREW IMPLANT ANCHORAGE FOR ANTEROPOSTERIOR TOOTH MOVEMENT**
   - Use of miniscrew implants for absolute anchorage when mesial movement of posterior teeth is not indicated
   - Miniscrew implant anchorage for retraction of the entire dentition
   - Miniscrew implant anchorage for molar distalization
   - Miniscrew implant anchorage for anterior movement of posterior teeth

7. **MINISCREW IMPLANT ANCHORAGE FOR INTRUSION OF TEETH**
   - Indications for intrusion
   - Intrusion using miniscrews
   - Design of the appliance
   - Optimum force levels
   - Occlusal and facial consequences of orthodontic intrusion
   - Miniscrew implant anchorage for intrusion of the entire dentition
   - Miniscrew implant anchorage for intrusion of posterior teeth
   - Miniscrew implant anchorage for intrusion of anterior teeth

8. **MINISCREW IMPLANT ANCHORAGE FOR TRANSVERSE AND ASYMMETRIC TOOTH MOVEMENT**
   - Transverse and asymmetric tooth movement

9. **OTHER USES OF MINISCREW IMPLANTS**
   - Using miniscrew implants for intermaxillary fixation
   - Local tooth movements
10. COMPLICATIONS AND THEIR MANAGEMENT

Complications during and following insertion
Complications during the loading period
Complications during removal