

## **Short Bio**

Dr. Erdal Bozkaya was born in 1986 in Bolvadin, Afyonkarahisar, Turkey. He graduated from the Faculty of Dentistry at Gazi University in 2009 and completed his Ph.D. in Orthodontics at the same institution in 2015.

He served as an Assistant Professor in the Department of Orthodontics at Gazi University from 2015 to 2022 and received the title of Associate Professor in 2022. He currently continues his clinical practice, academic research, and educational activities in the same department.

His professional interests in orthodontics include orthodontic biomechanics, temporary skeletal anchorage devices, orthognathic surgery, clear aligner therapy, and digital orthodontic applications. He has numerous scientific articles and book chapters published at national and international journals, and has presented many papers at scientific conferences. He has also studied in various research projects.

Dr. Bozkaya is a member of professional organizations such as the Turkish Orthodontic Society (TOD) and the European Orthodontic Society (EOS). He is married and has three children.

## **Mechanical Advantage in Orthodontics: The Power of IZC Screws**

The success of orthodontic treatments depends on achieving desired tooth movement in a controlled and predictable manner. In this context, temporary skeletal anchorage devices (TADs) offer significant advantages to clinicians. Among these systems, miniscrews placed in the infrazygomatic crest (IZC) area stand out for their potential to provide strong and stable anchorage.

In this presentation, based on current scientific data, the biomechanical contributions of IZC screws, their mechanical advantages compared to traditional anchorage systems, clinical application techniques, and case-based examples will be discussed. The anatomical features of the IZC region, crucial points to consider during screw placement, clinical indications, and recommendations for preventing complications will also be presented.

Furthermore, we will discuss how IZC screws are effectively used in complex movements such as molar distalization, total arch distalization, and intrusion, as well as the possibilities for their combination with clear aligner therapies. Through evaluations of sample cases, the aim is for participants to acquire knowledge that can be directly applied to their clinical practice.