Research Aid Award

Dr. Shivam Mehta, *University of Connecticut Health Center*

Biography

Dr. Mehta is a second-year orthodontic resident at the University of Connecticut. He graduated from dental school at College of Dental Sciences & Research Center and completed his Master of Dental Science at Government Dental College & Hospital, Ahmedabad at Gujarat University, India. After a year of practice in orthodontics, he did a fellowship in 'Recent advances in Orthodontics' at the University of Illinois at Chicago, College of Dentistry. He has a keen interest in pursuing an academic career as a clinician-scientist and has been proactive in advancing his knowledge in clinical orthodontics and translational research.

Project Synopsis

Osteogenesis Imperfecta (OI) is characterized by low bone mass that predisposes affected individuals to musculoskeletal fragility. The most common therapeutic treatment for OI patients is the administration of bisphosphonates. OI patients have multitude of dental problems and they require orthodontic treatment to achieve proper function, stability and esthetics. However, literature lacks the evidence regarding the nature of Orthodontic Tooth Movement (OTM) in an OI individual. Additionally, how the treatment with bisphosphonates affect the OTM and orthodontically induced root resorption is yet to be studied.

This research project will unravel the events occurring during OTM and thus, help the clinicians to achieve predictable OTM in OI individuals. It will help the clinicians to utilize efficient treatment mechanics and achieve pleasing orthodontic outcomes. The information gained about root resorption will help the clinicians to better understand, avoid damage and prevent root resorption in their orthodontic practice while doing OTM in OI patients. The knowledge gained from this proposal will be invaluable for clinicians treating OI individuals and will help them make informed decisions in providing better care to an OI individual seeking orthodontic treatment.

Importance of AAOF Funding

Dr. Mehta is very thankful to AAOF for funding the project. The support and generous funding from AAOF RAA play a key role in conducting his research. Dr. Mehta's desire is to join academia after graduation. Completion of this research will serve as a key professional stepping-stone to further his career aspirations in academia combining his interests in clinical excellence and research.