

## Functional occlusion: The fundamentals of predictable dentistry

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How is functional occlusion related to predictable dentistry? A vast majority of clinicians around the world understand the basics of occlusion, but do not understand the relevance it has on the outcomes for their patient's treatment. In order to comprehend functional occlusion, one must obtain information pertaining to the patient's joints, muscles, occlusion and teeth. The procurement of this information allows the dentist to become a physician of the entire masticatory system. This presentation will provide information and illustrations on how functional occlusion allows dentists to practice predictable dentistry. The very goal of using these principles is to have consistent predictable results, thereby making the practice of dentistry less stressful and more rewarding.

**Introduction:** An anonymous person once said that "It's beauty that captures your attention; personality which captures your heart." In complete dentistry, however, it is "functionality" that truly captures the heart of the practitioner. Undoubtedly, there is nothing more beautiful and essential than to have crafted teeth that appear natural and function perfectly. Ironically, however, this marriage of form and functionality is the most overlooked aspect of clinical dentistry. The fundamentals of occlusion are directly related to function. In other words, form does follow function. The understanding of how the masticatory system functions in relation to the dentition allows the dentist to provide treatment that is not only predictable, but natural, and long lasting. One of the goals of a perfected occlusion is to have equal intensity contacts on all teeth while the joints (TMJ) are seated in centric relation. In addition, the anterior teeth also play an important role in establishing correct occlusion and the envelope of function, the path that the mandibular incisors take during functional movements. When anterior teeth are restored, the patient's envelope of function must be correctly restored to achieve natural movements of the mandible. Predictable dentistry involves creating acceptable, natural, and long lasting restorations. These restorations must exceed our patient's expectation and more importantly, our own.

## Learning objectives:

- 1. Understand the principles of occlusion
- 2. Apply these principles in everyday practice
- 3. Learn the connection between occlusion and predictable dentistry
- 4. Understand the "envelope of function", and how it relates to occlusion
- 5. Understand the four points of complete dentistry
- 6. Understanding the signs of occlusal disease
- 7. Using photography and diagnostic models to recreate the envelope of function
- 8. Learn to achieve predictable esthetic results for your patients

## **Biography**

Neeraj Khanna attended the University of Toronto and completed his Bachelor of Science Degree (1989). He then continued Post Graduate studies at the University of Detroit Mercy- School of Dentistry and earned his DDS degree (1993). He then completed a General Practice Residency at the University of Rochester-Strong Memorial Hospital in Rochester, New York (1994). After being an Associate dentist for several years, he opened his practice (March 2000) in Illinois. Since then, he has been extensively involved in continuing education, and completed training at the prestigious Dawson Academy (St. Petersburg, FL). He has dedicated his practice to excellence in comprehensive restorative and esthetic dentistry. His philosophy involves treating every patient in the four aspects of complete dentistry. This includes achieving harmony between jaw joints, muscles, supporting tissues, and teeth. His passion for complete dentistry has led him to become involved with the Dawson Academy as an Associate faculty member. He has lectured in the United States, India, and UAE

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