



Academy of Prosthodontics Annual Scientific Session Sofitel Hotel, Chicago, Illinois May 9-12, 2018

Program Speaker - Dr. Suresh Nayar

Title

Digital Design and Simulation in Advanced Jaw Reconstruction with Prefabricated Vascularised Flaps

Abstract

The use of bone containing microvascular flap transfer techniques has significantly improved jaw reconstruction in head and neck oncology. However, functional oral rehabilitation with osseointegrated implants is challenging due to issues in achieving accurate osteotomy and optimal insertion and positioning of the bone flaps. The advent of advanced digital technologies and surgical design and simulation to plan the jaw reconstruction, has allowed the surgery to be raised to new levels of precision and accuracy. This has led to combining the resection, reconstruction and rehabilitation pathways in head and neck oncology resulting in significant reduction in timescale to oral rehabilitation. To achieve this level of sophistication, along with the convergence of various technologies, it is important that the planning and management is carried out by a team of specialists in various fields. This presentation will share the use of digital design and simulation in advanced jaw reconstruction using a team approach.

Learning Objectives

1. To understand the use of surgical design and simulation in planning of jaw reconstruction and oral rehabilitation in head and neck oncology.
2. To appreciate the need for a team of specialists to be involved in planning and management in head and neck oncology.
3. To recognize the significant reduction in time to oral rehabilitation in head and neck oncology when advanced digital technologies are employed in its management.

Biography

SURESH NAYAR, BDS, MDS, MFDSRCS, MRDRCS, MRDRCP, FDS (Rest Dent) RCS, MPhil

Dr. Nayar is an Associate Professor at the University of Alberta and Maxillofacial Prosthodontist at the Institute for Reconstructive Sciences in Medicine, Canada. He is an Adjunct Associate Professor with the Faculty of Rehabilitation Medicine at the University of Alberta. He obtained his BDS and MDS (Prosthodontics) in India. He obtained further specialist training in the United Kingdom where he was awarded Prosthodontic Specialty Memberships from the Royal Colleges in Edinburgh and Glasgow in 2007 and Fellowship of the Royal College of Surgeons of England in 2008. He completed a Research Master of Philosophy degree in 2012. His current research interest includes patient reported outcome

measures and improving quality of life in head and neck cancer patients, methods to reduce the effects of radiotherapy on head and neck cancer patients, and development of a digital impression technique, among others.