



## **American Academy of Maxillofacial Prosthetics WEBINAR – February 5, 2022**

**Program Speaker – Chris Butterworth, MPhil, FDSRCS(Eng.),  
FDS (Rest Dent), RCS(Eng.)**

### **Title**

Zygomatic Implant Based Rehabilitation of Patients with Maxillary and Mid-Facial Malignancy: Emerging Protocols and Accelerated Treatment Paradigms.

### **Abstract**

Malignant tumours of the maxilla and midface provide a significant challenge to the multi-disciplinary head & neck cancer team seeking to provide curative as well as reconstructive and rehabilitative treatments. Resections in this region create complex oral and facial defects with loss of important structures such as the eye, the nose as well as the maxillary dentition. Microvascular free tissue transfer is an important surgical modality in this patient group but many diverse treatment approaches have been presented in the literature and often prosthetic rehabilitation is compromised, delayed or lacking. In addition, this patient cohort has reported overall worse survival rates than other head and neck sites and together with the frequent use of radiotherapy, prosthetic rehabilitation is highly complex.

The advent of zygomatic implant therapy with both conventional and oncology-modified zygomatic implants (ZIs) has provided many possibilities for early prosthetic rehabilitation using the remote anchorage available in the facial skeleton. Placement of ZIs at the time of primary surgery with or without microvascular flap reconstruction has allowed the development of treatment protocols to provide support and retention for a wide range of facial and dental prostheses.

This lecture will focus on the presenter's experience over the past 18 years in one of Europe's largest head & neck cancer centres, during which time he has surgically placed and restored over 400 ZI's in patients with maxillary & midfacial malignancy. He has developed innovative techniques such as the Zygomatic Implant Perforated (ZIP) Flap procedure which combines the use of immediately placed skeletally anchored zygomatic implants with microvascular soft tissue flap reconstruction for rapid fixed dental rehabilitation even in cases requiring post-operative radiotherapy. Data will be presented from several published studies from the Liverpool Unit as well as illustrative cases to demonstrate the treatment approaches employed.

### **Biography**

Professor Chris Butterworth is a UK-based Maxillofacial Surgical Prosthodontist who has worked at University Hospital Aintree since his appointment in 2003. He has built an international reputation for innovative care in the field of oral & facial rehabilitation following head & neck cancer and has won several

national and international awards for his work on implant-based prosthetic rehabilitation. He has pioneered the combination of skeletally anchored zygomatic implants in combination with microvascular free flap reconstruction for patients with maxillary and mid-facial malignant diseases (the ZIP Flap technique). He is actively involved in research within the Head & Neck Centre and regularly lectures at national and international meetings. He was the youngest ever national president of the British Society of Prosthodontics in 2011/12. Chris has authored over 50 scientific papers, several textbook chapters and is the lead author on the restorative guidelines for UK based head & neck cancer patients.