

Reconstruction of Cranial Bone Defects Using Alloplastic Implants Produced from a Stereolithographically-generated Cranial Model

A C Cheng,^{*BDS, MS, FRACDS}, A G Wee,^{**BDS, MS, Cert Prosthodontics}

Abstract

Larger cranial bone defects can cause cranial disfigurement as well as potential mechanical brain trauma. Conventionally pre-fabricated acrylic cranioplasty implants require complicated procedures and result in potential dimensional and contour inaccuracies. The development of stereolithographic techniques for generating acrylic resin skull models allows the pre-fabrication of custom acrylic resin cranial implants with greater clinical predictability.

Ann Acad Med Singapore 1999; 28:692-6

Key words: Cranioplasty, Implant, Stereolithography

* Head of Maxillofacial Prosthetics
Ontario Cancer Institute-Princess Margaret Hospital, Toronto, Canada

** Assistant Professor
Section of Restorative Dentistry, Prosthodontics and Endodontics
College of Dentistry, Ohio State University, USA

Address for Reprints: Dr Ansgar Cheng, Department of Dentistry, Ontario Cancer Institute-Princess Margaret Hospital, 610 University Avenue, Ontario, M5G 2M9, Canada.