

# PROOF OF PATIENT SIMULATORS FOR SIMULATION BASED TRAINING BASIC IMPLANTOLOGY MODELS

Dental implants do much more than replace missing teeth. They help maintain and strengthen bone structure, provide the ability to chew healthy food, and give patients the confidence to smile. They also protect existing teeth by helping to preserve bone structure. Hence, sound knowledge about the surgical procedure, case selection, bone anatomy must be known to the clinicians before placement. The key to success of an implant depends on its placement for successful and ease in prosthodontic rehabilitation for the final crown. One of the challenges the clinician can face is during the sequential osteotomy procedure. In order to understand the procedure of drilling into the bone and to feel the consistency, many educational aids/training models have been introduced. The preferred choice of material is polycarbonate as it mimics a D2 to D3 type of bone which is the most preferred for implant placement. Polycarbonates are strong, stiff, hard, tough, transparent engineering thermoplastics that can maintain rigidity up to 140°C and toughness down to -20°C or special grades even lower. The main advantage is that it offers manufacturers and designers opportunities for design freedom, aesthetics enhancements and cost























## **ORTHOGNATHIC SURGERY - MOCKUP MODELS**

Mock up model is used to mimic the surgical procedure befor the surgery in an external environment to observe and to finalise the amount of surgical correction that is required to bring the occlusion to an ideal position.





#### SUTURE MODELS

Dental simulators for suturing is a preclinical training provided to the postgraduate students of the specialty of Periodontology. These simulators provide a hands on experience on various techniques of periodontal suturing like simple loop interrupted figure of eight , horizontal and vertical mattress etc which is commonly used in various surgical procedures. The postgraduates also master the basic principles of suturing which will increase their technical expertise





## **SUTURE MODELS**





## SUTURE MODELS





## SUBGINIGIVAL SCALING MODELS

Preclinical training on subgingival scaling is provided on dental simulators.

Subgingival calculus has a flint like consistency which is hard and tenacious and cannot be visualized by naked eye and is removed using tactile stimulus. Thorough subgingival scaling eliminates gingival inflammation. Hands on training on placement of instruments for each site along with the art of scaling for removal of subgingival calculus on dental simulators.

## SUBGINIGIVAL SCALING MODELS

## **BEFORE SCALING**





## SUBGINIGIVAL SCALING MODELS

# AFTER E SCALING



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