



MEET SURGIO, YOUR HYPER-REAL IMPLANT SURGERY PARTNER THE COLUMBIA DENTOFORM SURGICAL IMPLANT MANIKIN SYSTEM

Columbia Dentoform by DENTALEZ has been working with dental educators for over 100 years, providing the highest quality teaching aids and products to train each new generation of dentist and dental surgeon. We thrive on creating customized, smart solutions for our most forward-thinking and innovative educational partners.

Now, we are excited to bring you a barrierbreaking implant surgical manikin that will change the landscape of academic and professional implant dental education.

For the first time, students can learn with a true, extremely accurate simulation model, using our advanced surgical manikin system. Stand head and shoulders above the competition, and provide your students with an unprecedented, true-to-life implant surgical experience.

Columbia Dentoform

Over 100 Years – Since 1917



At Columbia Dentaform we understand that what your students need most is real-life practice.

Surgio is the one and only surgical and restorative manikin system with extraordinary realism for procedural accuracy on a number of sites including non-aesthetic and aesthetic implant restoration, moderate full-arch removable restoration, advanced full-arch fixed restoration and advanced sinus augmentation & implant-supported 3-unit bridge.

REFERENCE PAGES

Procedure	Page No.
#5 Single Unit, Non-Aesthetic Implant Restoration	Page 5
#9 Single Unit, Aesthetic Implant Restoration	Page 5
Advanced Sinus Augmentation and Implant Supported 3-unit bridge	Page 6
Advanced Full-Arch Fixed Restoration	Page 6
Moderate Full-Arch Removable Restoration	Page 7
Curriculum Chart	Page 7

Surgio provides the 'real feel' of soft tissue cutting, bone exposure, implant placement, suturing, and post-operative implant restoration. Students placing their first implant case will experience a true procedural simulation, working within the confines of the oral cavity, managing light obstruction and refraction, tissue rebound and tongue protrusion.

Surgio can be easily mounted to a bench or a dental chair and has a drain plug and tube in the throat region for use of water during placement and easy cleanup of dust/debris when drilling.



Tissue

- Labial tissue reacts and rebounds like human cheek tissue, simulated tongue intrudes procedurally just like a real tongue
- Hyper-accurate soft tissue allows for instruction of proper flap incision techniques
- Tissue can be impressed with PVS, polyether or putty impression materials without releasing agent needed, no material adhesion
- Tissue can be re-attached with simple cyanacrylate adhesive post incision/suture for impression taking

Gingiva

 Accurately simulated gingiva: attached simulated periosteum; incises and holds sutures well; has attached mucosal tissue

Bone

- Accurately simulated bone densities in the proper regions of the mouth: D1 (symphasis), D2 (posterior mandible), D3 (anterior maxilla), D4 (posterior maxilla)
- Edentulous mandible provides excellent platform for teaching denture impression/ fabrication technique
- Manikin can be X-Rayed and CT scanned for use with implant and guided surgery software

#5 SINGLE-UNIT, NON-AESTHETIC IMPLANT RESTORATION

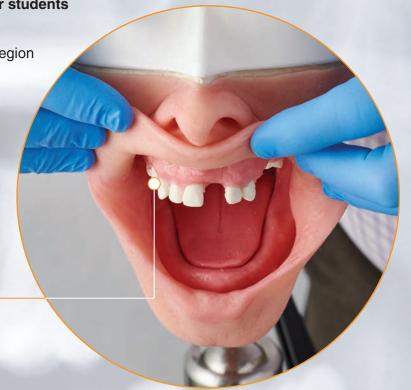
Anterior site with ideal patient presentation for students placing their first implant case.

- Accurate bone density (D3) for anterior maxilla region

 Adequate bone with good density for ease of placement

- Adequate tissue height and thickness
- Easy access in anterior region





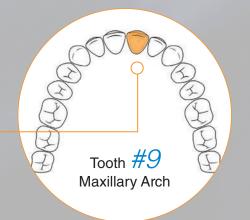
#9 SINGLE-UNIT, AESTHETIC IMPLANT RESTORATION

Moderate complexity single-unit, implant site in aesthetic region. Teaches proper implant placement angulation to maximize the aesthetic result.

- Accurate bone density (D3) for anterior maxilla region

- Slight buccal wall defect dictating slightly lengual implant placement

- Accommodates immediate or standard temporization techniques





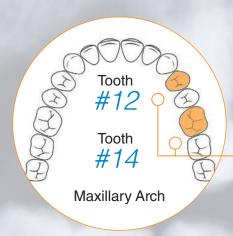
4

ADVANCED SINUS AUGMENTATION + IMPLANT-SUPPORTED 3-UNIT BRIDGE

 Accurately simulated sinus cavities with Schneiderian Membrane supporting either Caldwell/Luck (lateral wall) or Summers (crestal) lift technique

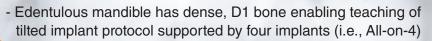
- Schneiderian Membrane is attached to the bone giving a very realistic "feel" to the sinus lift; must be carefully lifted away

 Sufficient coronal bone to place two implants 12 & 14 (post-lift with enough initial stability for restoration)





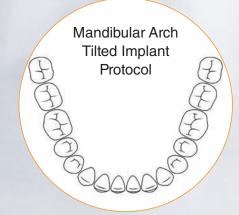
ADVANCED FULL-ARCH FIXED RESTORATION



- Excellent initial stability due to dense bone allows for immediate impression taking and pickup of the denture

- CT scan ability of model allows for digital case planning as well as surgical stent manufacture





MODERATE FULL-ARCH REMOVABLE RESTORATION

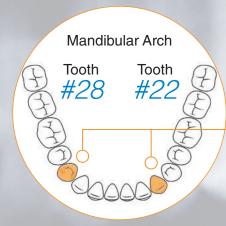
Fully edentulous mandible ideal for placement of 2 implants (#22, #28) and locator abutments for lower denture conversion.

- Accurate bone density (D1) for anterior mandible region

- Non-aesthetic site ideal for second implant case

- Promotes proper locator abutment placement, chairside pickup technique

 Utilizes student-fabricated (lower) denture for full-arch restoration





Application to Curriculum: The Surgio Manikin provides both novice and advanced case support. The system works seamlessly with all programs, and can be further customized to fit your exact curriculum.

Each student starting dental school will receive their own Surgio in their D1 year, and work with it as they progress, beginning with a simple case on #5, graduating down to the lower to practice two implants and learn indenture. Finally they will graduate back to the upper and do an aesthetic implant on #9.

Students working on more advanced techniques can practice advanced sinus augmentation + implant-supported 3-unit bridge.

	Undergrad	Advanced	Specialty
Single-unit Implant	Non-aesthetic #5	Aesthetic #9	
2-Implant	Full-arch removable denture (mandibular) #22 & #28		Implant supported 3-unit bridge (maxillary) #12 & #14, post sinus lift
4-Implant		Full-arch tilted implant protocol (All-on-4)	
Oral Surgery			Sinus augmentation lateral wall or crestal lift

6

The Surgio Manikin surgical system works seamlessly with all major implant manufacturers, and can be further customized to fit your exact curriculum. No matter which implant you teach with, your students can practice multiple surgeries on a hyper-realistic model.



DENTALEZ

