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## **Preface**

In the aviation industry, checklists dramatically reduce the incidence of human error and provide higher safety and success margins. As a licensed pilot, I rely on these checklists for my own safety and that of my passengers, which is why I have introduced similar checklists to use before oral implantology surgical procedures.

Challenges in the cockpit are similar to challenges in the surgical room. Any mistake can lead to drastic consequences. Therefore, just as a safe flight starts with a thorough preflight check (the pilot must check every fastener, inspect every rivet, and evaluate every moving part of the aircraft), implant surgery should start with a thorough presurgery check by the surgeon. Surgeons in the past relied solely on their memory for these checks, but the complexity of the information regarding the procedures today has exceeded our ability as individuals to properly deliver it to our patients in a consistent, correct, and safe manner. Some surgeons hang signs above taps where they wash their hands before surgery reminding them to check that they have the right treatment plan, the correct radiograph, the correct tooth, and even the right patient, but now these signs or post-it notes can be replaced with this very well-organized checklist booklet.

It has short but detailed reminders of all the important steps and their proper sequence that must be followed for the optimal surgical outcome, detailed lists of all instruments needed for most implant-related surgical procedures, postoperative instructions that patients must follow for proper postoperative care that is vital to surgical success, and last but not least, a few lists that provide a clear roadmap to follow in emergency scenarios that might be encountered during or after surgery.

The intent behind this booklet is to provide the implant surgeon (novice and experienced alike) with a tool that provides an extra margin of safety and help in making the surgical procedures (from the instrument setup to the postoperative instructions) run more smoothly and safely by creating a standardized approach and introducing the "culture" of the checklist.

Professionalism and safety come about as a result of an inner drive to do the best job possible, regardless of the circumstances. Competent and superior professionals should perform thorough checks before every procedure—even if no one is watching.

# 1.4 Immediate Loading Guidelines

<b>V</b>	Single Implant Cases
	Rule out the existence of any parafunctions (see the Functional Risk Factors Checklist, page 11).
	Confirm initial stability ≥ 40 Ncm of torque.
	Determine that bone has greater than D3 density (immediate loading should not be performed in soft bone even in the presence of high initial stability).
	Place the provisional crown out of the occlusion.
	Do not perform immediate loading distal to the first molar (in second molar area).
	Do not use short implants for single immediate loading cases. Check implant-crown ratio (minimum implant length of 9 mm when performing immediate loading).
	Instruct the patient to follow a soft diet for a minimum of 8 weeks.
	Perform immediate loading only in cooperative patients.

<b>V</b>	Multiple Implant Cases		
	The rules below are to be followed in addition to the rules for single implant immediate loading.		
	Splint the provisional crowns.		
	Keep the pontic as short as possible.		
	Do not use a cantilever design.		
	Ensure balanced occlusion of natural teeth (ie, no contact on the partial immediate-load prosthesis).		
	Confirm that an adequate number of implants are being placed.		
	Use a screw-retained provisional prosthesis (if possible).		
	Ensure maintenance of good oral hygiene.		

# 2. Surgical Checklists

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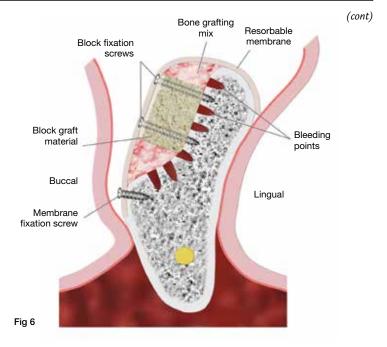
# 2.8 Grafting Using Allograft Block

Develop a treatment plan after a thorough clinical exam and review of the patient's CT scan. (See the Treatment Plan Development Checklist, page 17.) The shape of the bone loss pattern and the architecture of the soft tissue must be evaluated to verify that the edentulous area is a candidate for block grafting.

Acquire consent. Give the patient enough time to go over consent forms and the opportunity to express any questions or concerns, and then obtain a signature. More than one consent form may be needed (eg, one consent form for the oral sedation and one for simultaneous soft tissue grafting).

Prescribe medication. Antibiotics, an anti-inflammatory drug, an analgesic, and an antibacterial mouthrinse are recommended.

Administer anesthesia. Infiltration and/or block anesthesia in addition to oral sedation are recommended; however, the clinician might elect to use intravenous sedation instead of oral.



<b>V</b>	4.4 Postoperative Instructions for Sinus Elevation Procedure
	Take your presrcibed medications (antibiotics, analgesics, anti- inflammatory medications, chlorhexidine rinse, nasal spray, and decongestant) as directed.
	Avoid smoking.
	Do not blow your nose for 2 weeks because this could create positive pressure, which could spread air though confluent soft tissue planes, creating soft tissue emphysema.
	Avoid sucking liquid through a straw because this creates negative intrasinus pressure.
	Try not to sneeze or cough; if it is unavoidable, keep the mouth open to decrease internal antral pressure.
	Some nasal bleeding (oozing of blood through the nose) may occur during the first day.
	Rest as much as possible for the first 3 to 7 days following surgery.
	During the 24-hour period following surgery, place light pressure and ice packs extraorally over the surgical site (15 minutes on/15 minutes off).
	Keep your head elevated. On the first night, your head should be elevated on two or more pillows. This will prevent airway obstruction and aspiration of blood and heavy saliva and will diminish edema.
	Maintain a liquid diet for 2 days (Carnation Instant Breakfast, Meritene, and Ensure are recommended); then soft foods (the consistency of mashed potatoes or scrambled eggs) may be consumed following the second day and for at least 2 weeks (until the mucosal incision has closed completely).
	Do not wear a prosthesis for 2 weeks.
	Do not lift or pull on the lip to look at the sutures.
	Return to the office for a postoperative checkup in 1 week.
	Notify the office if you feel granules in your nose, if your medications do not relieve discomfort, or if you have questions.

V	5.1 Basic Implant Placement Instrumentation Setup
	Implant retractor
	Minnesota retractor
	Seldin retractor
	Weider tongue retractor (for mandibular cases)
	Siegel round scalpel handle
	No. 15C blades
	Molt 9 periosteal elevator
	Rhodes chisel (used to clean the bone surface of any soft tissue after flap reflection)
	Adson serrated tissue forceps (nonlocking)
	Adson 1 × 2 tissue forceps (locking)
	Castroviejo caliper
	Iris curved cutting scissors
	Needle holder
	Periodontal probe
	Mouth mirror
	Disposable tissue punch (for implant placement using a flapless technique)
	Suture material (see the table at the end of this chapter for the recommended suturing material)

The instruments above are required in addition to the anesthesia instruments and supplies, implant surgical kit, surgical motor, implant contra-angle handpiece, disposable irrigation tubing, sterile saline, and disposable infection control supplies (eg, sterile gloves, masks, sterile nonwoven gauze, head caps, sterile bib, and sterile gowns).

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