



Implantology assistant's guide

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All advice contained in this booklet is given for information purposes only. It is important to refer to current regulations and to recommendations of approved bodies such as the National Order of Dental Surgeons (ONCD) and Ministry of Health.

PACKAGING OF PARTS

STERILITY AND ASEPSIS RULES

	Sterile	Non-sterile
Implants	X	
Sealing screw or healing abutment (supplied with the implant)	X	X
Drills		X
Prosthetic parts		X

Parts delivered sterile

- The sterile **etk** parts supplied may be used for surgery on receipt. The reference indicator (1) adhered to the package indicates the effective sterility of the components (sterilisation by Gamma radiation).



- Any product delivered sterile should not be re-sterilised.
- The sterility of the parts is guaranteed for five years from the packaging date. It is essential to respect the expiry date of the product/device which is indicated on the labels of all the packages.

- Only an intact package guarantees the imperviousness and sterility of the products. Therefore implants whose packaging may have been damaged (even simply wet) or prematurely opened, should not be used. In this case, we invite you to contact our customer service or your sales consultant to ensure the return and exchange of the damaged product.
- The **etk** products and their packaging have been designed so that they can be handled, whilst maintaining their sterile state. It is therefore important to refer to the instruction manual and to respect precise handling so as to not compromise the conventional hygiene conditions of implant practice.

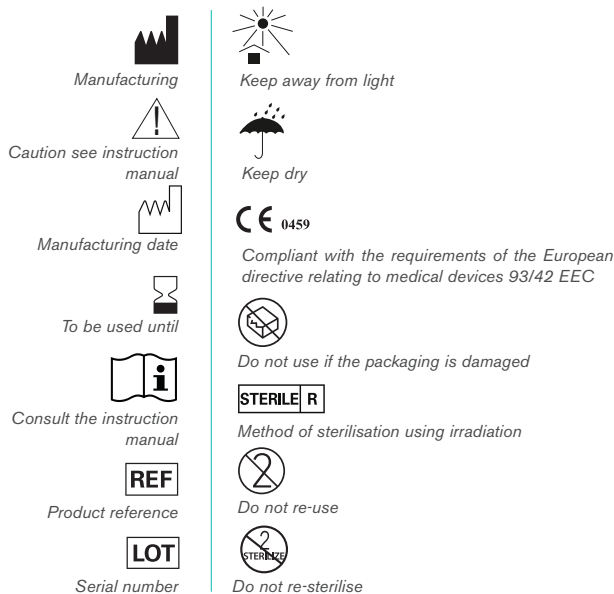
Non-sterile parts supplied

- Non-sterilised single-use components must be cleaned, disinfected and sterilised before being placed in contact with the patient's mouth. The use of a thermo-disinfector and a class B autoclave is possible on components outside of their original packaging in a suitable sachet according to the manufacturer's recommendations.
- All the reusable products must be pre-disinfected, cleaned, decontaminated and sterilised.
- In the case of plastic or ceramic components, they must always be disinfected using a suitable product prior to use in the mouth.
- In order not to deteriorate or damage the components, it is important to respect the different combinations of treated materials during the cleaning and decontamination.
- The detergent solutions and disinfectants must be PH neutral or slightly alkaline.
- For stainless steel, the use of sodium hypochlorite (Javel type) is strictly discouraged as there is a high risk of corrosion.

Traceability

- The implants and **etk** prosthetic parts are delivered with a main label and two removable labels which clearly indicate the trademark, reference and batch No.:
 - Two labels for the patient file of the practitioner who inserted the implants or the contact person.
 - One label for the patient to be adhered to the patient's card which will be handed to him/her after the surgery.
- In order to comply with the legal obligations of traceability of implantable medical devices, it is necessary to keep all the delivery notes on receipt of the products. In fact the batch numbers are indicated on these delivery notes.

QR for simple and quick access to the instruction manual



STORAGE OF PARTS

- The implants must be kept in a clean, dry and cool place.

PRECAUTIONS FOR USE

- It is highly recommended to have a stock of implants which make it possible to cover the main diameters as well as the different lengths. It is essential to be able to choose the correct implant during a procedure, to replace an implant which has been contaminated for any reason, to place an extra implant in certain cases in order to ensure long-term treatment.
- It must be ensured that there is a sufficient quantity of sterile alternative instruments.
- All of the instruments must be sterile, complete, checked and functional, in particular for measuring instruments (calibrated according to the manufacturers' recommendations) before the surgery.
- Sharp instruments must present a low level of wear and tear: not used more than ten times. In order to monitor the level of wear and tear of surgical instruments, you can use the file "**Table for monitoring the wear and tear of drills**" which is delivered with the surgical kit.

- Any preparation of the implant site with contra-angle cutting and turning instrumentation must be carried out with abundant irrigation of the sterile physiological serum type (NaCl) or sterile water.
- It must be ensured that thermal and surgical injuries are minimised, that any contaminant (of the saliva type) and any source of infection that may compromise the osteointegration or aesthetic result is limited.
- It is necessary to guarantee that there is safe handling of implant components and instruments against the risk of falling into the mouth or outside of the sterile field owing to their small size. It must be checked that there is a good grip on the handling devices and instruments.

The dental assistant occupies a strategic position within the dental practice: from appointment bookings to the final handshake, she embodies the brand image and gives a first impression to the patient of the quality of the care provided in the practice.

Your meticulous organisation and technical skills provide the practitioner with efficient support in his daily practice. You also know how to reassure and inform the patient on the conduct of the scheduled care throughout the treatment plan. With this booklet we wanted to provide you with advice so as to better guide you during your implantology work within the dental practice. Throughout this manual we touch on different subjects (from the setting up of the room, management of the patient to the proper handling of surgical instruments and prosthetic parts) in order to support you in your role as professional dental assistant.



ORGANISATION

One of the key elements for the conducting of problem-free surgery will be your organisation Plan several days head for the operation so that you can ensure that:

- The required implants have well and truly been selected by the practitioner and ordered for the treatment
- The rotating equipment is in good working order.
- The equipment has been sterilised according to acknowledged rules of the art and packaged in double sachets.
- The practice has all the disposable consumables likely to be used during the intervention (compresses, sutures, sterile surgical blades, suction, sterile kit, etc.).

If the dental practice does not have an operating unit, plan to remove from the room all apparatus or devices which are not required for the surgery and which may clutter up your work space. You may then firstly ensure the appropriate conditions of cleanliness by using surface disinfectant (spray or cloth) on the work surfaces, chair and other devices present in the treatment room (radio generator, light box, etc.).

Think of calling the patient the day before the intervention. This is the time to confirm his/her appointment, check that he/she has remembered to take the pre-medication prescribed for him/her, to remind him/her to eat before coming and give a reassuring word on the placement of implant(s).

On the day of surgery remove all jewellery (watch, rings, bracelets) from your hands as they are vectors of contamination. Your nails must be short and without nail polish. Before covering the room with sterile towels and preparing your instruments, think of taking out the documents which concern your patient:

- His/her file.
- His/her medical questionnaire.
- His/her X-rays.
- His/her scan.

You will then be able to prepare your room.

Your clothing will of course be suited to your profession: a short-sleeved shirt as well as trousers and shoes exclusively reserved for a dental practice. If you have long hair, it will be tied up.

Initially you will simply wash your hands using a brush for thirty seconds on each hand, then you can start the surgical disinfection of the hands (see appendix). If you use disinfectant soap, respect the soaping time recommended by the manufacturer (between 2 and 5 minutes). It will not be necessary to use a hydro-alcoholic solution afterwards.

SURGICAL DISINFECTION OF HANDS

by friction with a hydro-alcoholic product (HAP)

1st rubbing of the hands

Distribute the product over the entire hands, forearm, including elbows and rub until completely dry.

2nd rubbing of the hands

Same rubbing technique until completely dry, the elbows being excluded from the application.



Respect the dosage and the time recommended by the manufacturer in order to comply with the EN 12791 standard.

PREPARATION

The room

If possible, request the assistance of a colleague or your practitioner. Ideally the one should be dressed in sterile clothing and the other can open the sachets for him/her. In this manner you avoid any risk of cross contamination.



Use all the options on offer in your “sterile room kit”, the suction tubes and motor must be covered by a sheath, the working spaces shall also be protected by sterile towels. Also think of protecting the surgical lighting arms.



The practitioner

If you are assisting the practitioner with dressing, make sure that he has all the items at his disposal: surgical brush, gentle soap, hydro-alcoholic hand gel, sterile clothing including gown, cap and overshoes. Think of adding a second pair of gloves at the place where the dental surgeon carries out his/her preparations in case a glove tears or falls.

For both of you, check that your protection and/or eye glasses are clean and disinfected.



The patient

It is important that you take your patient's well being into account. Make sure you reply to his/her questions and reassure him/her about the procedure. He/she must enter the operating room in a calm state of mind: it is the time to offer him/her a glass of water or suggest that he/she go to the toilet and to inform him/her that once you are in the room it will no longer be possible until after the procedure.

Once prepared, you can settle the patient comfortably in the chair. Disinfect all parts of the face around the mouth (lips, cheeks, chin and nose). Warn you patient that a tingling sensation may occur after application, it is important that he/she does not touch this area with his/her hands. With the practitioner's approval you can then place a sterile covering with window after having explained to the client the necessity for it.

Firstly, ask him/her to rinse his/her mouth with a suitable solution of mouth wash (check that the patient is not allergic to iodine or to Chlorhexadine and choose the appropriate product). If he/she wears a removable prosthesis, he/she must remove it.

Secondly, you will dress the patient in overshoes, a sterile gown and his/her head will be covered with a cap.



TIPS

- *Always plan to have "more" in case your gloves or those of your practitioner tear or become contaminated, or if your suction falls etc. The same applies to suture thread, needles and anaesthetic cartridges or even for certain instruments such as the mirror, stripper, tweezers. If any instrument falls, you will be able to replace it immediately without having to leave the room or open a drawer. Plan the same for selected implant(s).*
- *Refrigerate the irrigation pouch the day before or a few hours before surgery, and have available the thermal cushion to be given to the patient at the end of the procedure in order to optimise its duration.*

THE ASSISTANT GUARANTEES THE SMOOTH PERFORMANCE OF THE TREATMENT

As with any dental care you must facilitate the practitioner's visibility of the implant site on which he is working. Take care to maintain the flap with a firm and constant support on the bone in order to offer maximum access to the site.

The surgical light must be redirected in relation to the changes of position requested of the patient throughout the surgery.

Saliva is a contamination vector and source of discomfort for the patient during the treatment, you must therefore be particularly careful to provide accurate and regular suction.

It is necessary to guarantee that there is safe handling of implant components and instruments against the risk of falling into the mouth or outside of the sterile field owing to their small size. It must be checked that there is a good grip on the handling devices and instruments.

Ensure that the X-rays and/or scan are accessible at one glance during the surgery, whether on a digital, silver film medium or scanner boards.

AN EFFICIENT DUO

You form an integral part of the healthcare team and must therefore provide your practitioner with constant support during work involving 4 hands, and also act as an efficient back-up at the surgical site. Think of reorganising the instruments by repositioning them so that the dental surgeon can find them again easily throughout the surgical procedure. Your organisation will then help to avoid unnecessary loss of time, which are sources of stress for both the practitioner and you.



SUPPORT AND CONTROL OF THE SURGERY

It is important that you anticipate the conduct of the procedure as a whole. Take your time to familiarise yourself with the surgical kit and discuss it with the practitioner. What implant(s) is he going to place? What drills will he use? Do you know at what times you have to change the rotation speed of the contra-angle? When will irrigation no longer be necessary? Will a biomaterial be required?

You must act as a “watchdog” during the procedure, be attentive to the dental surgeon’s gestures so as to anticipate each stage of the surgery.



Naturall+ and Naturactis surgery kit

HEALING

The practitioner has several healing possibilities once the implant is in place. Depending on the type of planned prosthesis, he will therefore choose to use a sealing screw, a healing abutment or an iphysio® profile designer.

The cover screw

Each implant is supplied with a cover screw. Once the implant has been placed, the practitioner will cover the implant platform with the cover screw and suture the gum above it. It is then said that the implant has been “fostered”. During the healing phase, the implant will thus remain invisible in the patient’s mouth. Once effective osteointegration has taken place (generally considered to be 6 months for the upper jaw bone and 4 months for the lower jaw bone), it is then necessary to schedule a second surgical stage.

The dental surgeon will then make a small incision to access the cover screw and exchange this for a healing abutment. It is not always necessary to suture after this intervention. This method is generally chosen to optimise the osteointegration and primary stability.

The healing abutment

It is quite conceivable to place a healing abutment on the same day as the placement of the implant. It is a mandatory stage for the preparation of the gum and its healing prior to the prosthesis. The healing abutment guides the gum in its regeneration and helps to recreate a gingival papilla. The diameter and height is chosen in terms of the shape of the desired prosthetic bridge.



iphysio® Profile Designer

Just after the placement of the implant, the surgeon will connect an iphysio® profile designer which facilitates both the healing of the tissue depending on the anatomy of the tooth to be replaced, but also the digital or conventional taking of an imprint at the end of the osteointegration period. It is also conceivable to prepare a temporary crown on this Profile Designer.



TIPS:

- *Think of warning the patient of the different stages, explain to him/her that there will be water, that he/she will most certainly feel vibrations for example. An informed patient will be more cooperative and it will therefore greatly simplify the work of your team.*
- *Take the time to properly know and distinguish each item of your ETK surgical kit, you will most certainly act more efficiently for your practitioner.*
- *It is up to you to ensure that access to the implant site is easy. Constantly think of facilitating the view and access of the dental surgeon: **remove, illuminate, suction.***

PATIENT MANAGEMENT

After the surgery, you will be able to remove the sterile covering with window from the patient. You will then proceed with thorough cleaning of his/her face to remove any traces of blood or iodised disinfectant. Raise the chair to an upright position and ask him/her to remain seated for a few moments to avoid faintness. This is the time to give him/her a thermal pouch so that he/she can immediately apply cold after the procedure.

ADMINISTRATIVE MONITORING

Recover the blisters of the implants used - they contain labels which you will require to ensure the traceability of the implants in your patient's file.

Ensure that the patient leaves with the documents that he will require for the different health organisations (treatment form, paid invoice, prescription) and make sure that his/her contact details are up-to-date. Do not forget to hand him/her the "patient card" on which will appear the references of the implant placed.

Do not hesitate to repeat to him/her the points raised in the "post-operative advice" which you will hand to him/her and reply to any of his/her questions.



HYGIENE AND SAFETY

After clearing the room, throw away sharp/cutting objects (scalpel blades, suture and anaesthetic needles) in the yellow container provided for this purpose in your room.

Take care to respect the hygiene and asepsis rules during decontamination and sterilisation of your instruments with the same thoroughness as for all your surgical procedures.

Check and monitor the wear and tear of drills using the table in the appendix. Change the drills after having been used ten times, in order to maintain an optimal cut.

The surgical dynamometric key is dismantled for thorough cleaning and sterilisation.

The irrigation line and the physiological serum pouch are only used once and may therefore be discarded at the end of the procedure.

Each item of your implantology motor (façade, pedal, electrical cords, contra-angle support, irrigation solution holder rod) must be disinfected and cleaned with a suitable product (surface spray or cloth).

To maintain your contra-angle you can use a machine dedicated to the maintenance of rotary instruments which will take care of the disinfection and internal lubrication of the system ("Lubricare" type). If you do not have one in the dental practice, you should successively use a cleaning spray then lubricant. Think of purging your contra-angle for two seconds in order to evacuate the surplus of grease before placing the instrument in a sachet. Replace the micromotor's protective cap before placing it in a sachet and place it in the autoclave.

TIPS:

- *Always wear gloves when handling contaminated instruments and objects. Systematically use a "Gouge forceps" to remove the blade of a scalpel, **never use your fingers**, even if you are wearing gloves.*
- *Do no hesitate to provide your patients with an additional packet of sterile compresses which they can use at home if bleeding occurs.*
- *Create a monitoring file for the implant break, it will help you to always find the references of an implant for a patient and to provide statistics on the type and number of implants placed throughout the year.*
- *Check up on your patient a few hours later by telephoning him/her. This attention will always be appreciated.*

MONITORING OF THE PATIENT

A check-up appointment will be scheduled fifteen days after the surgery. It is the time to check the healing and to remove any stitches that are becoming uncomfortable.

Take the opportunity to remind your patient that the lifespan of his/her implant also depends on the care that he/she takes of it. Take the time to explain to him/her how to stimulate the gum and how to clean the healing abutment with an adapted tooth brush (recommend the post-surgical model, which is softer). Once the prosthesis is in place, you can show your patient how he/she will best use the different accessories (dental floss, interdental brush, plaque revealer) at his/her disposal to personally ensure his/her prophylaxis.

The patient must be conscious of the importance of undergoing check-ups at the dental practice. Think to remind him/her that he/she must make an appointment every six months for descaling and a thorough examination of his/her prosthesis on implants.

In conclusion

During implant surgery, you are expected to be extremely well organised upfront and to perfectly master your sterilisation chain. What is more, your human qualities, your calmness and empathy will be veritable assets, both to reassure and accompany the patient and to assist and support the practitioner throughout the surgery.

As the pivotal hub within the practice, you will be able to act as the link between various dental care operators, the practitioner and patient without forgetting the prosthetist and sales consultant.

Your training and application, as well as your temperament, will ensure the realisation of a smooth treatment plan from the first X-ray to the placement of the final prosthesis on the implants.

NOTES

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