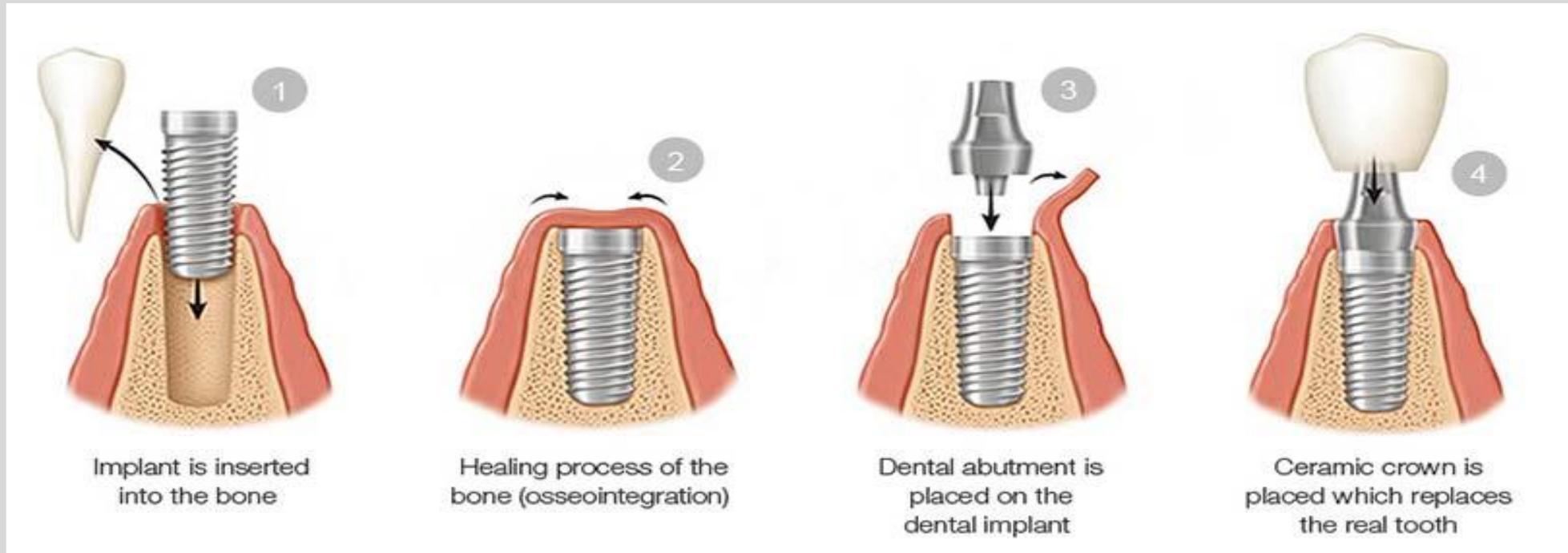




DENTAL IMPLANTS

Parts and Process

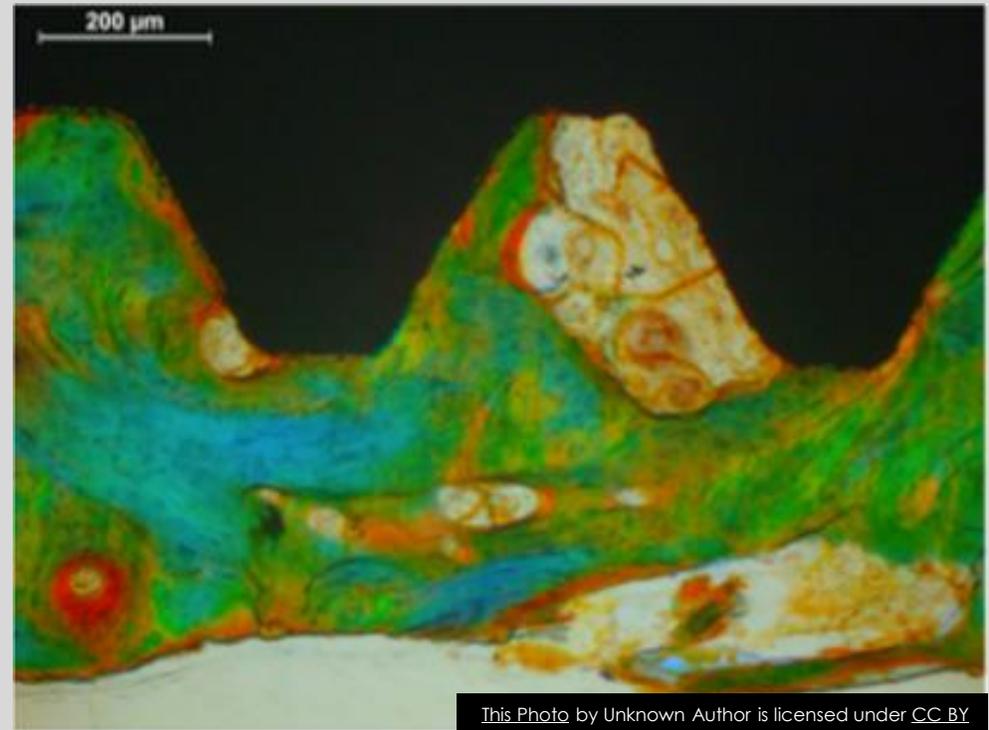
The Dental Implant



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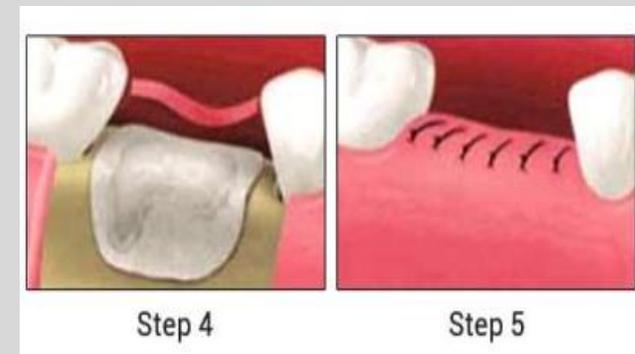
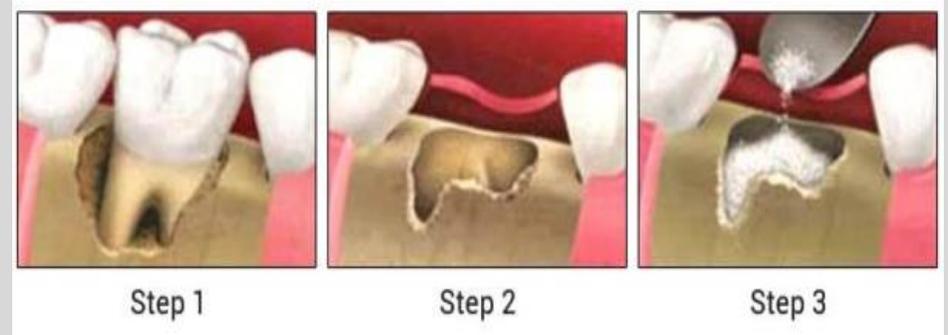
The initial appointment

- Dental implants are a very successful replacement for missing teeth, the first dental implant was placed in a human in 1965 by Dr. Per-Ingvar Brånemark. They have been in use for 65 yrs!
- Dental implants are successful because of a process called osseointegration: proteins called hemidesmosomes attach to the surface of the implant.



After extraction

- The first step of the implant process is removal of the tooth (obviously!)
- The surgeon then has the option to place a bone graft or not. (D7953)
- In some instances the implant will be placed at the exact same time, this will often require a bone graft. (D6104)
- This process is followed by 3-4 months of healing



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Bone grafting materials



Allograft granules



Bone syringe



Bone putty

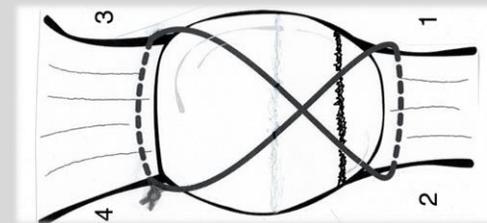


Sterile Saline

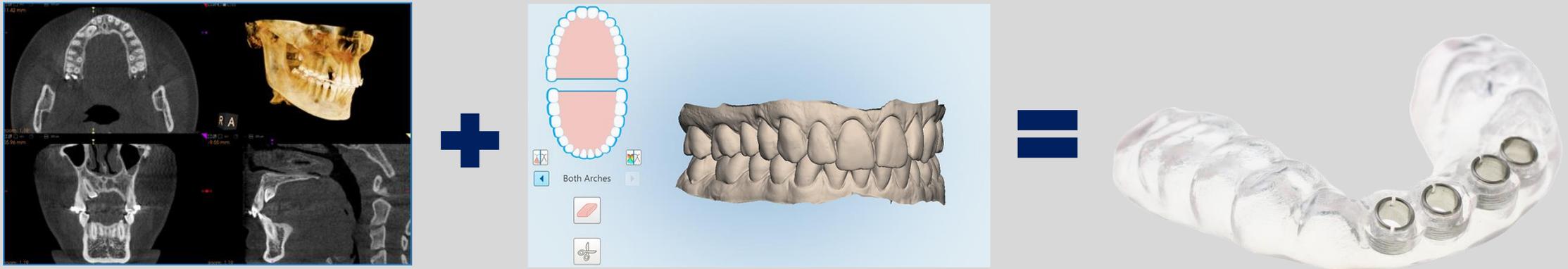
- During bone grafting the bone is delivered into the socket and packed firmly. This can be done with allograft granules or a bone putty.
- The allograft granules must be hydrated with sterile saline before use
- The bone putty may be delivered directly

Bone Grafting materials

- After the bone grafting material is placed it must be protected. This can be done by placing a collagen plug or a collagen membrane
- The surgeon will then close with a figure of eight suture with prolene, a non-resorbable suture
- The sutures will be removed 2-3 weeks later after closure is mostly complete



Surgical guides: a digital surgery



- To prepare for the implant surgery a full arch cone beam radiograph and an single arch iTero[®] scan will be performed. The iTero scan will be sent to Anatomage.
- Assistants will please leave the name and surgical date, if scheduled, with the doctor. The doctor will place the implant in the conebeam and direct Liz to order the implant.

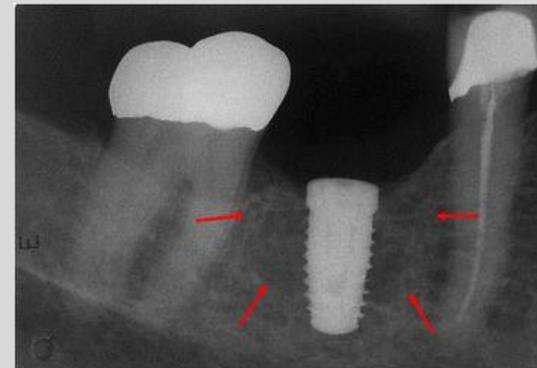
Implant placement: an actual surgery

- The surgeon will open an access to the bone in the form of a flap or a tissue punch.
- The doctor will then perform the osteotomy using the surgical guide and the Anatomage drill handles



Implant placement: an actual surgery

- The Anatomage drill kit has stops designed to only allow the drills to penetrate a certain distance. The length of the required drills will be listed on the paperwork that comes with the surgical guide.
- After the osteotomy is complete the surgeon will place the implant at a 45 Ncm torque.
- A radiograph will be taken to ensure proper depth.

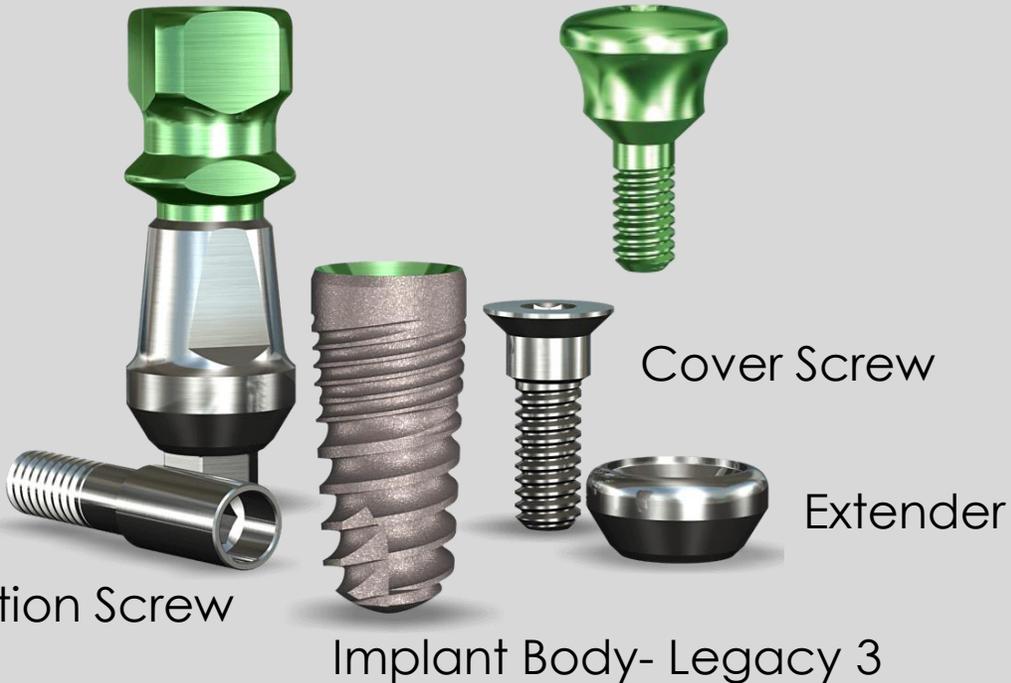


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The Dental implant

Impression Coping/
Stock Abutment

Healing Abutment



- The original Legacy 3 comes with everything needed to fabricate a crown directly for the implant This will be followed by an analog impression
- The SimplyLegacy 3 only includes a healing abutment
- The surgeon can choose whether to place a healing abutment or completely cover the implant this is referred to as either one-stage or two stage surgery, respectively.

The Abutment: do we always have one?



Scan Body



Stock/Prefab abutment-D6056



Locator Abutment



Impression Copings



Ti Base



Semi-Precision Attachment abutment-D6052



Custom abutment-D6057



Implant supported crown- D6065

The Implant crown

- The implant crown is fabricated from either a digital (using a scan body) or analog (using an impression coping) impression.
- The crown can either be screw-retained or cement retained
- Cementing is sometimes required for esthetics; however, leftover cement can lead to implant failure.
- In a screw-retained restoration the screw access is filled partially with Teflon tape and partially with a composite, I prefer a dentin shade.



THE LOCATOR® OVERDENTURE

A LESS INVASIVE, COST EFFECTIVE OPTION

A WELCOME ALTERNATIVE TO O-BALL MINI IMPLANTS

Dramatically reduced vertical height for patient comfort when the denture is removed - as well as increased denture strength



- 1 The LOCATOR Attachment's dramatically reduced vertical height provides patient comfort when the denture is removed, as well as increased denture strength as compared to O-Ball attachments
- 2 Aggressive thread design that widens at the coronal portion providing primary stability when immediate loading may be indicated
- 3 Proven RBM roughened surface on entire length of the implant
- 4 Self-tapping design for ease of implant insertion and increased implant stability

O-BALL MINI IMPLANT	VS	LOCATOR OVERDENTURE IMPLANT
7.85mm	HEIGHT WITH DENTURE CAP	4.85mm
10° or less	DRAW CORRECTION	40° between implants
O-rings wear and need to be replaced often	WEAR	Long term durability due to nylon male and pivoting feature
One	LEVELS OF RETENTION	Multiple levels - O-Rings
No - the entire implant must be replaced	RETRIEVABILITY	The LOCATOR Attachment can be replaced separately, if needed
Cuff height is incorporated into the implant collar and cannot be changed	CUFF HEIGHT OPTIONS	2 interchangeable heights available, 2.5mm or 4mm
Titanium grades vary	MATERIAL	Strongest Ti alloy available

Mini-implants: what's the deal?

Mini-implants are a more cost effective solution to missing teeth. They will often not need a surgical guide and can be loaded the same day. They were however, not designed to last a long time.