bone & tissue education

botiss academy

New Projects Allografts

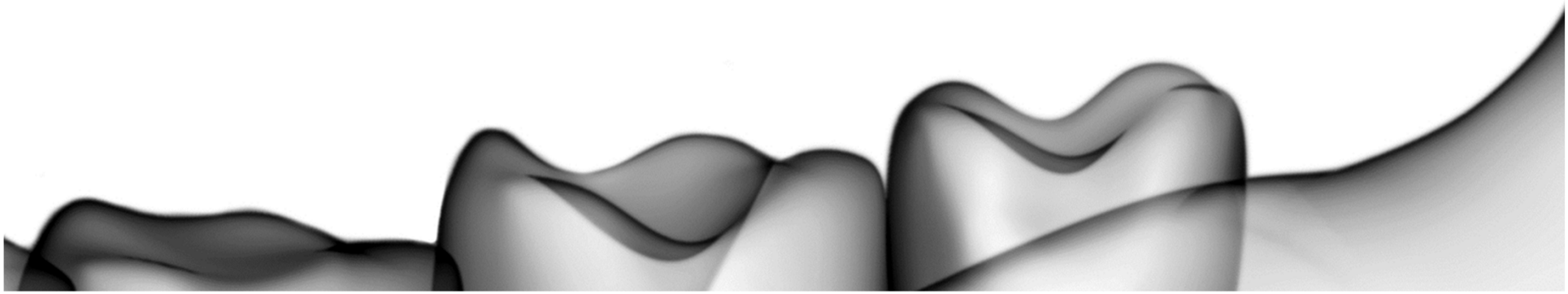
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definition

“The transplant of an organ or tissue from one individual to another of the same species

(with a different genotype)”



Why allograft ???

„golden standard“ → autologous bone, **but**:

- limited availability
- second surgical procedure
  (pain↑, complications↑)

allogenic bone graft

- excellent matrix for bone regeneration and revascularisation
  → physiological morphology and biomechanical properties
  → 100% resorbable

→ **full bone remodelling within 6 months!**

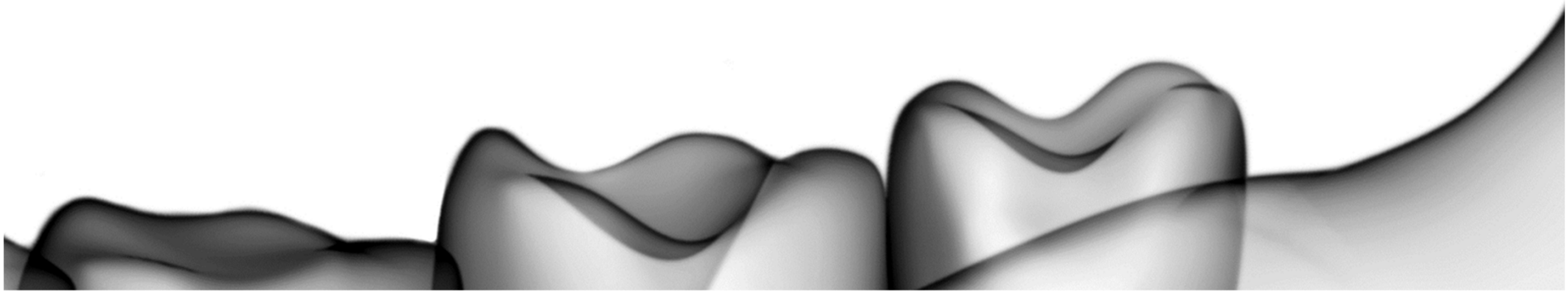


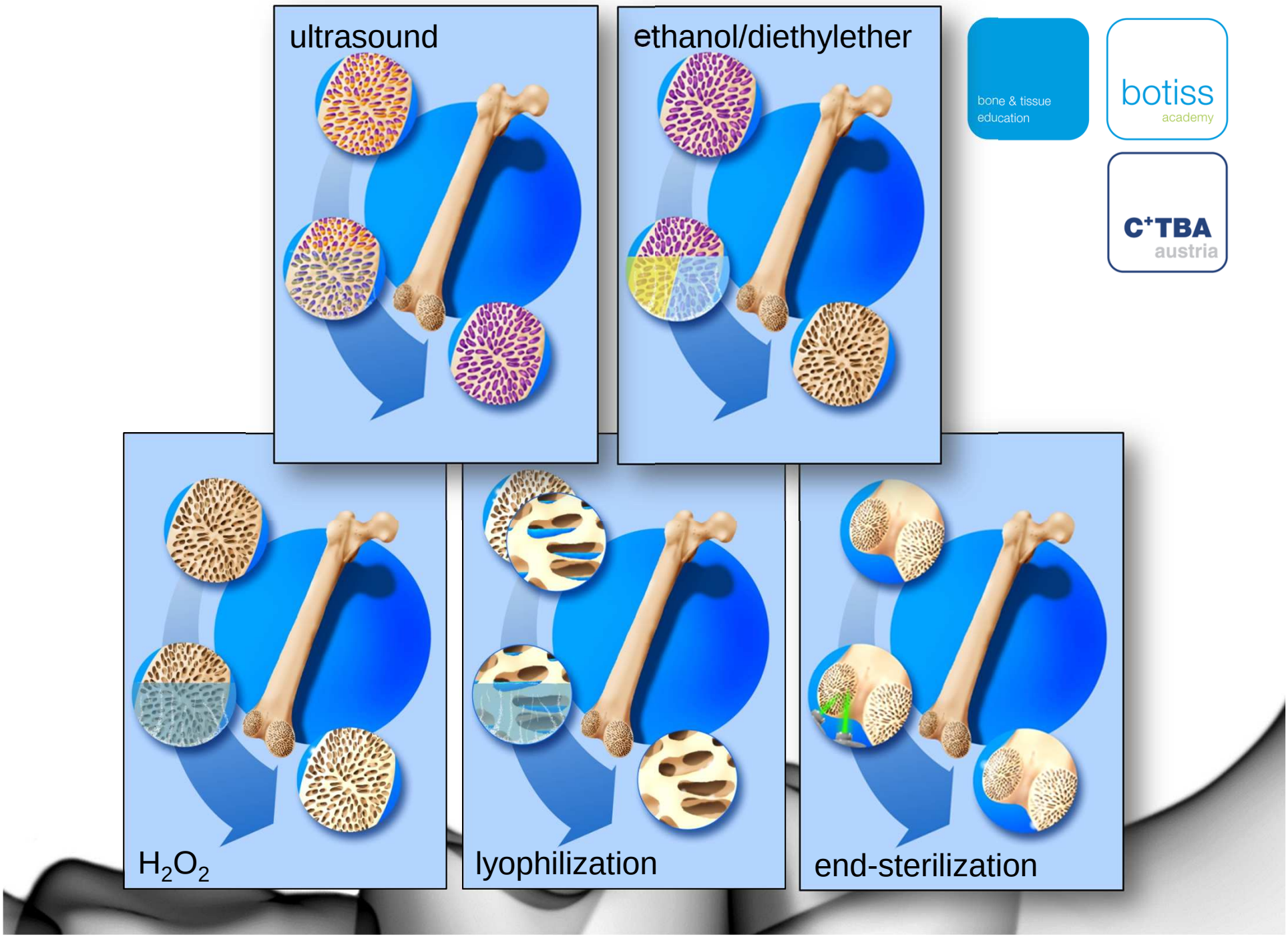
donation and procurement

- < 60 certified procurement centres in D, A, CH

- living patient donors
  - detailed anamnesis (risk factors for infection/disease/malignancy)
  - written consent
  - explantation of femoral head
  - serological testing (HBV, HCV, HIV, Lues)

- state of the art processing of human bone tissue

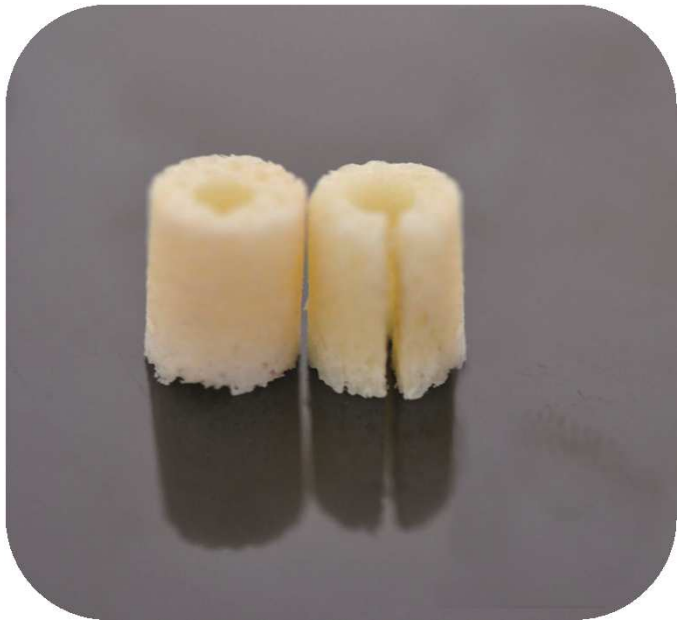


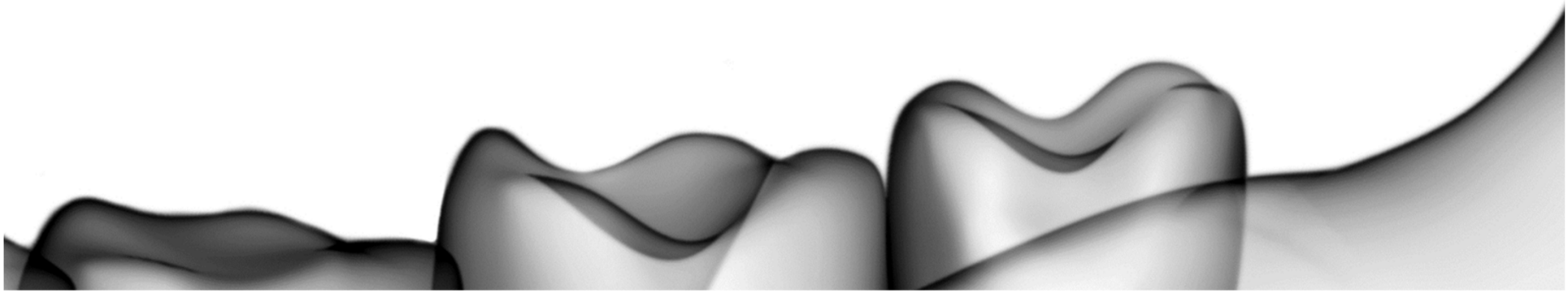

ultrasound
ethanol/diethylether
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H_2O_2
lyophilization
end-sterilization

botiss bonering®

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bonering® - indications

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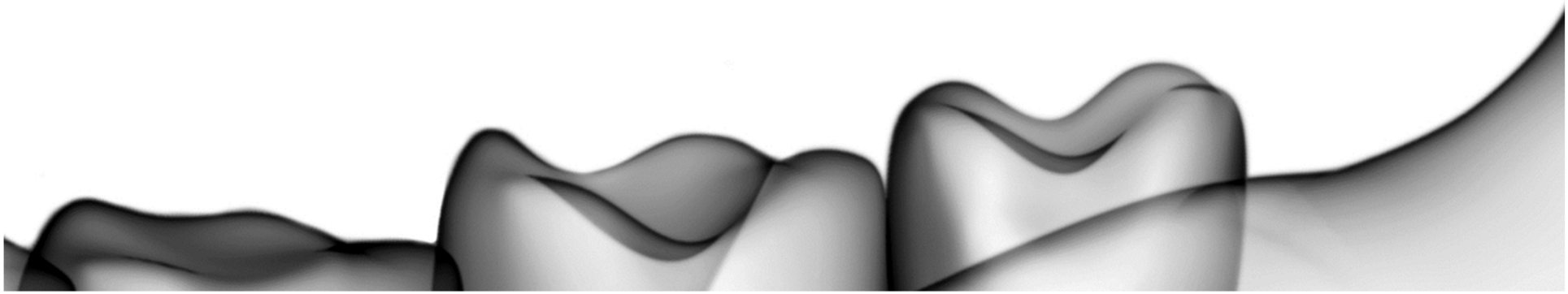
- Single tooth gap

- Edentulous space (two or more teeth)

- Severely atrophic jaw

  → horizontal and **vertical** augmentation

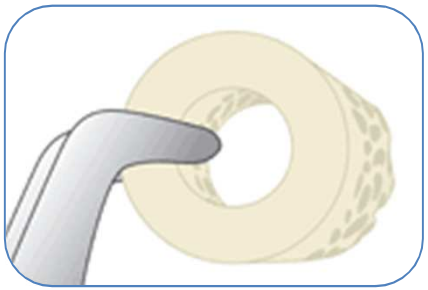
- Sinus floor elevation



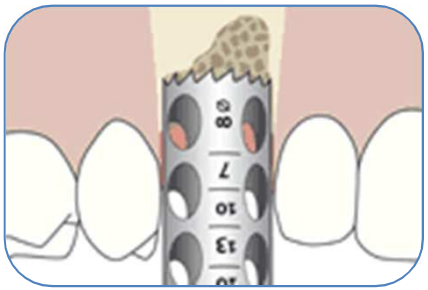
The bone ring technique

bone & tissue education

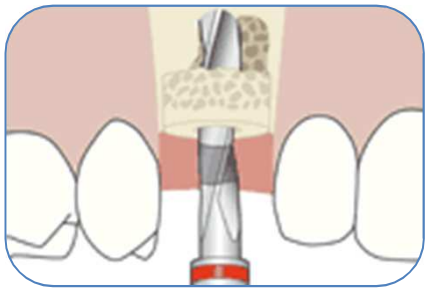
botiss academy



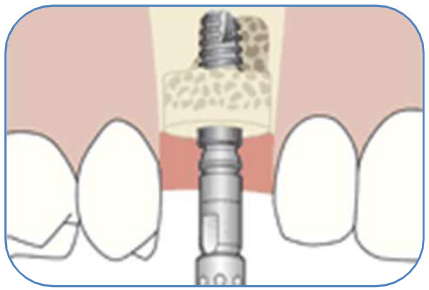
bonering®



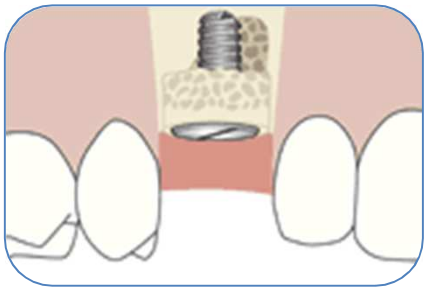
prepare receptor site for fitting the transplant using the trephine drill



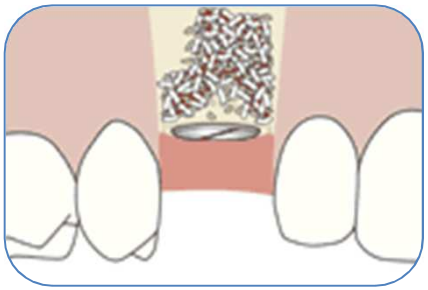
Insert bone transplant and prepare the implant bed



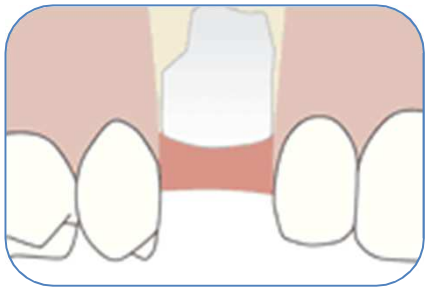
Insert the implant through the bone ring



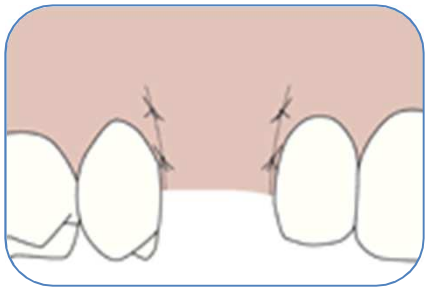
Fix transplant and implant using the membrane screw



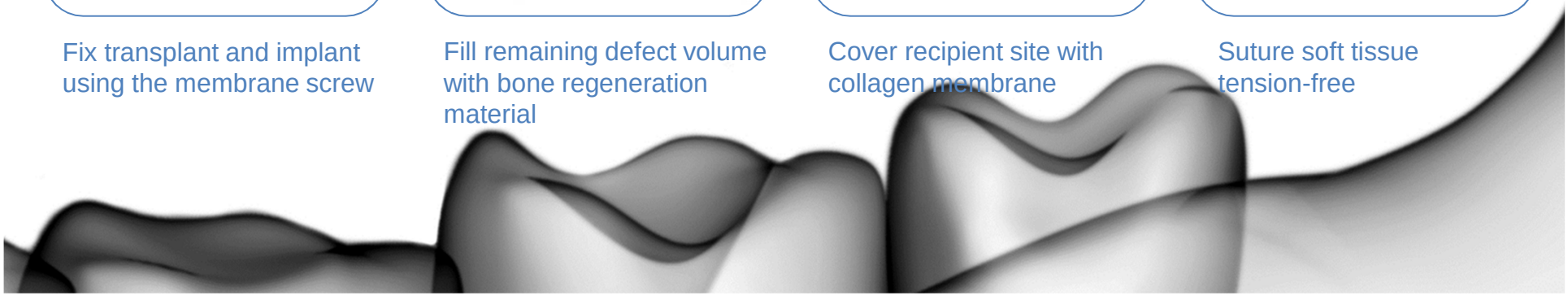
Fill remaining defect volume with bone regeneration material



Cover recipient site with collagen membrane



Suture soft tissue tension-free



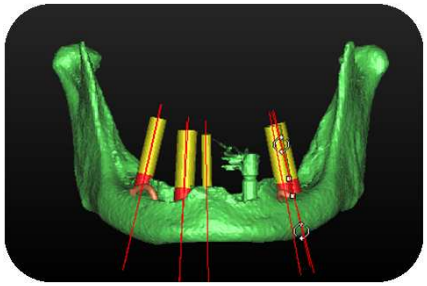
The bone ring technique - case report

Dr. Bernd Giesenhagen & Dr. Orcan Yüksel

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Patient with atrophic jaw; planning of implantation



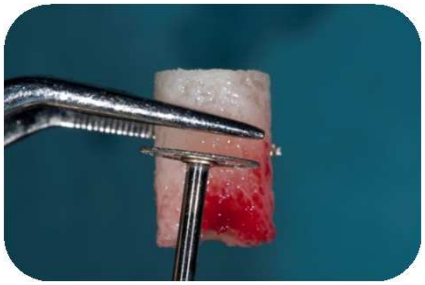
botiss bonering® dimensions: 7mm/3mm(outer/inner diameter) and 10mm height



Rehydrated bonerings



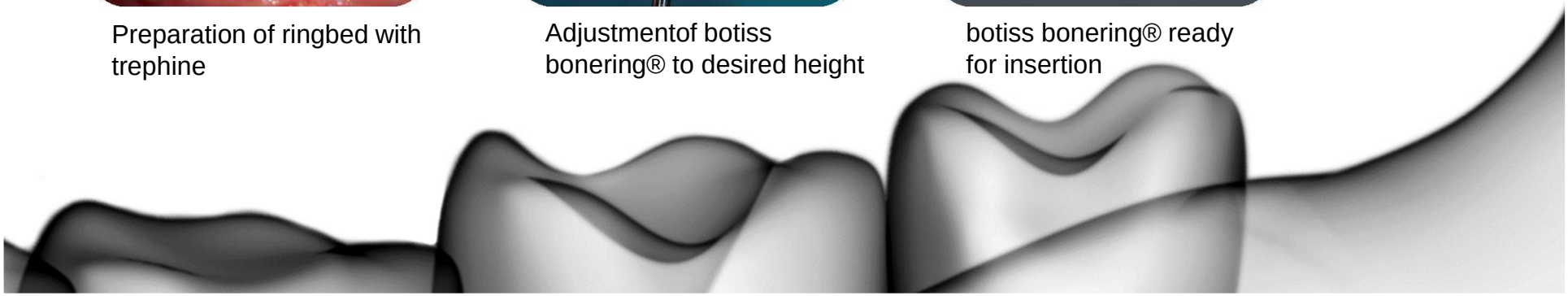
Preparation of ringbed with trephine



Adjustmentof botiss bonering® to desired height

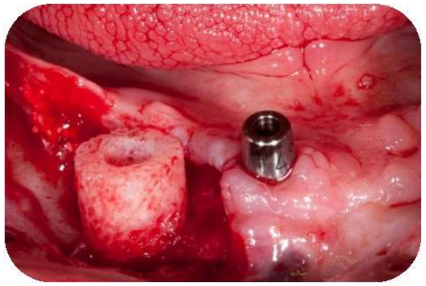


botiss bonering® ready for insertion

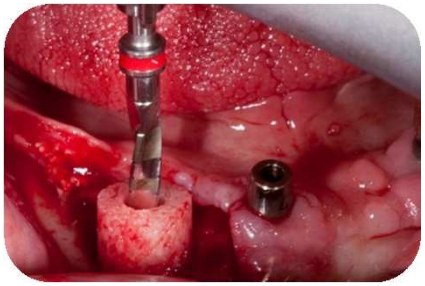


The bone ring technique - case report

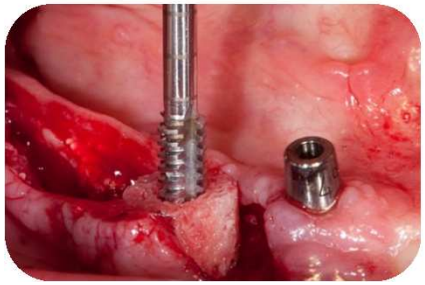
Dr. Bernd Giesenhagen & Dr. Orcan Yüksel



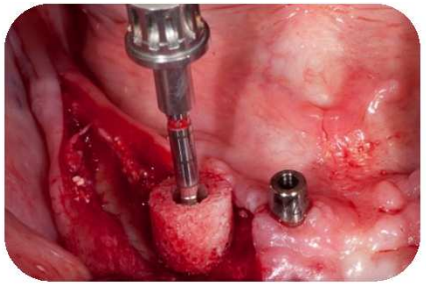
Insertion of first botiss bonering® in right jaw



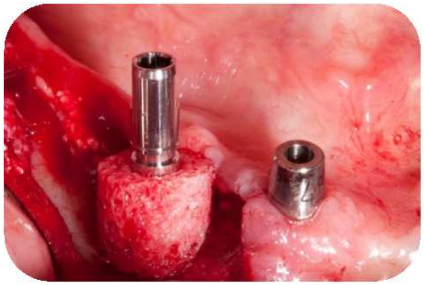
Drilling of the implant bed



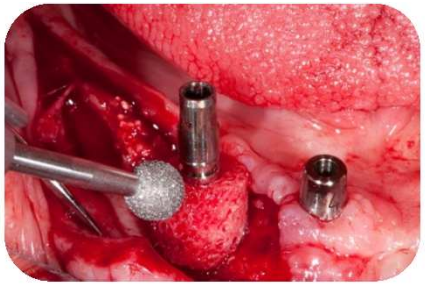
Drilling of the thread



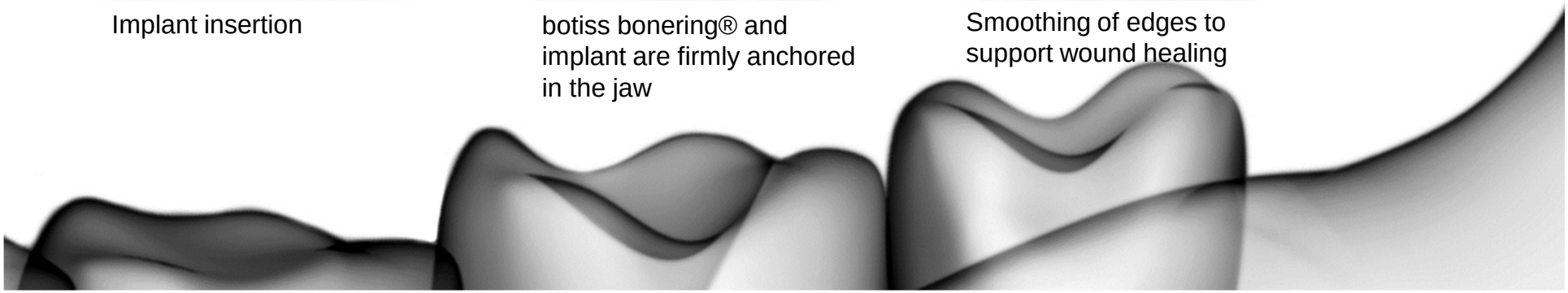
Implant insertion



botiss bonering® and implant are firmly anchored in the jaw

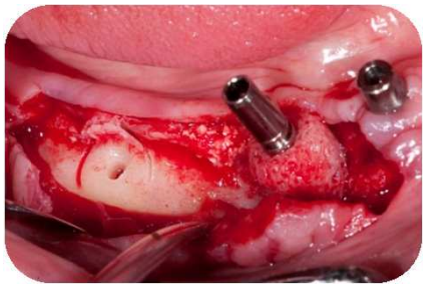


Smoothing of edges to support wound healing



The bone ring technique - case report

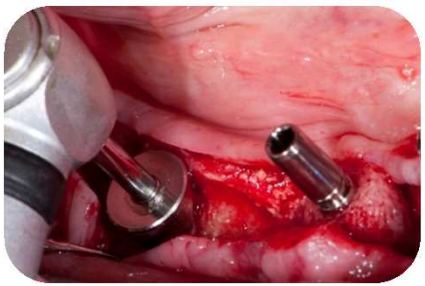
Dr. Bernd Giesenhagen & Dr. Orcan Yüksel



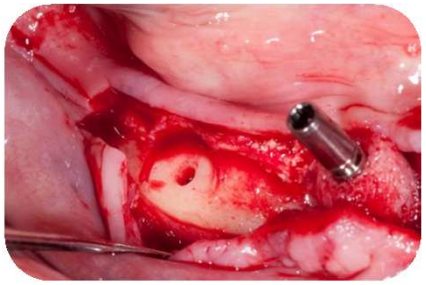
Preparation of second ring bed



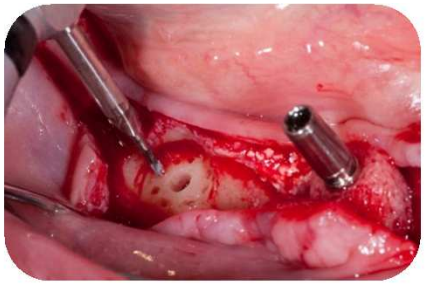
Planator to level…



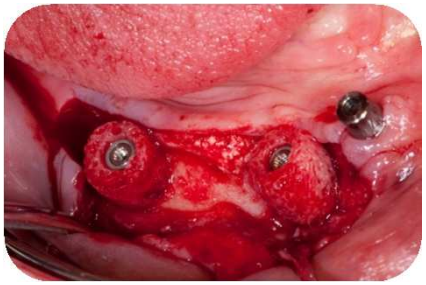
…vital bone to create a planar surface for the bonering



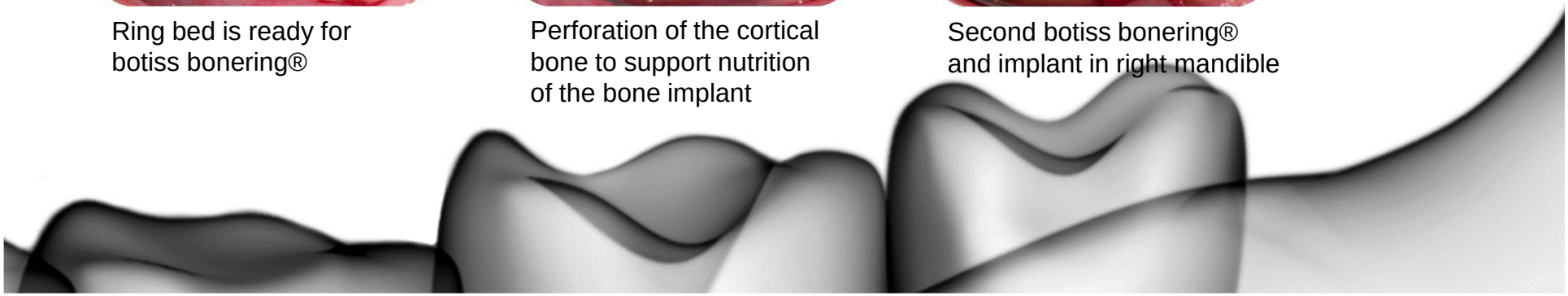
Ring bed is ready for botiss bonering®



Perforation of the cortical bone to support nutrition of the bone implant

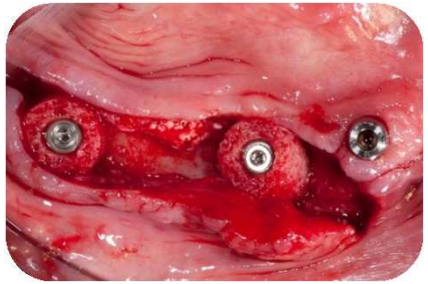


Second botiss bonering® and implant in right mandible

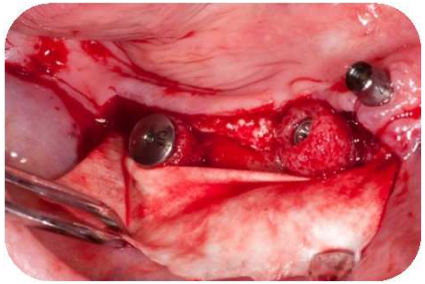


The bone ring technique - case report

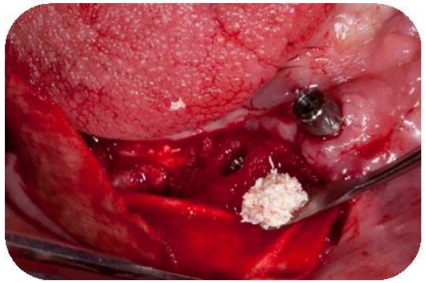
Dr. Bernd Giesenhagen & Dr. Orcan Yüksel



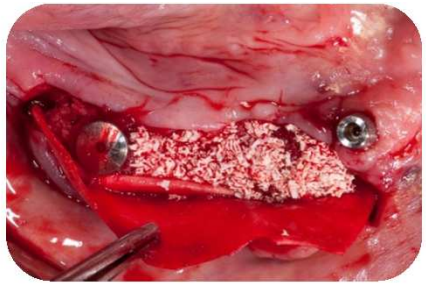
Second botiss bonering® and implant in right mandible



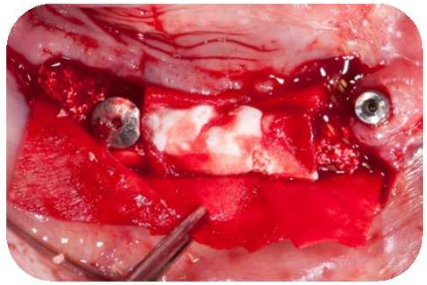
Additional fixation via membrane screw and insertion of collprotect® membrane



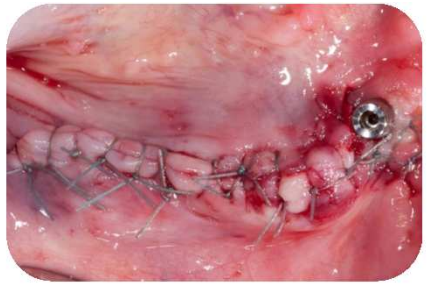
Filling of the residual defect volume with cerabone®



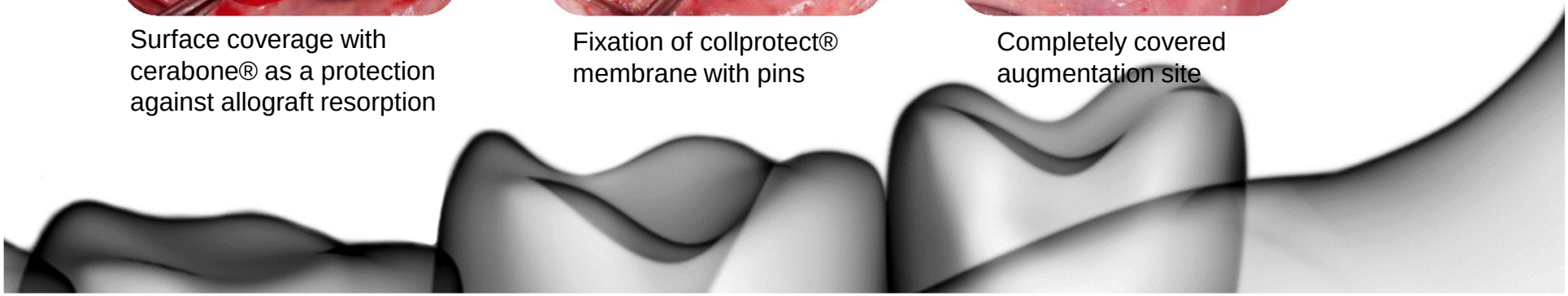
Surface coverage with cerabone® as a protection against allograft resorption



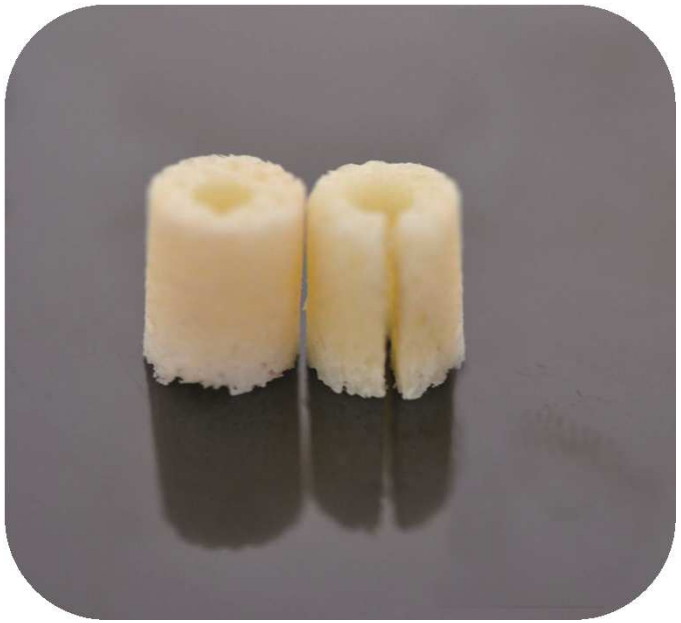
Fixation of collprotect® membrane with pins



Completely covered augmentation site



bonering® - product specification



Dimensions:

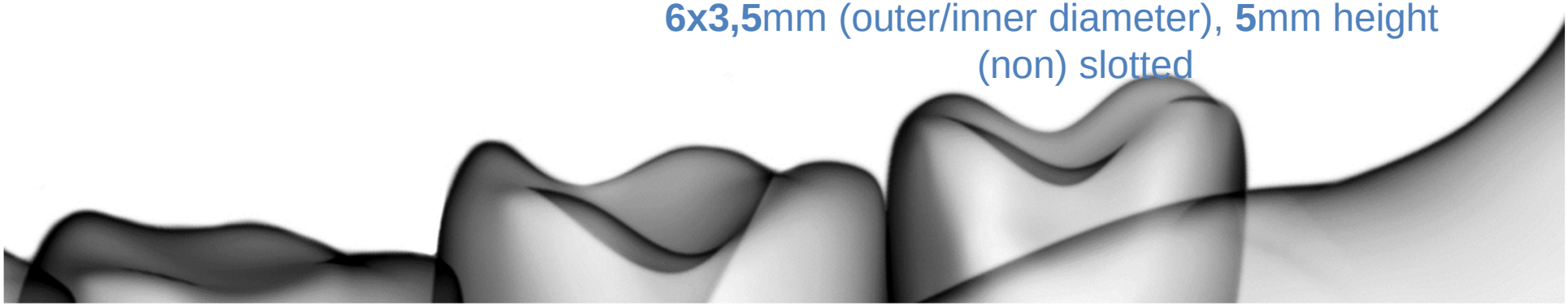
7x3,5mm (outer/inner diameter), **10**mm height (non) slotted

6x3,5mm (outer/inner diameter), **10**mm height (non) slotted

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7x3,5mm (outer/inner diameter), **5**mm height (non) slotted

6x3,5mm (outer/inner diameter), **5**mm height (non) slotted



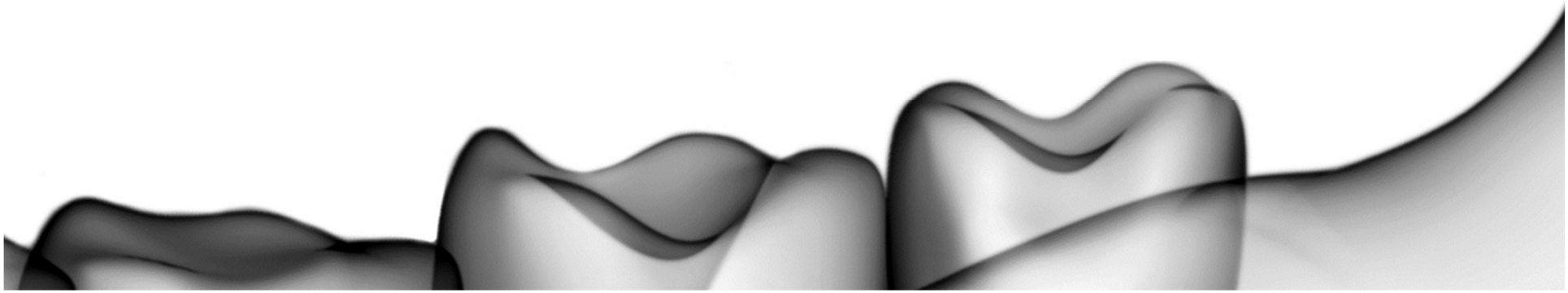
bonering® - kit

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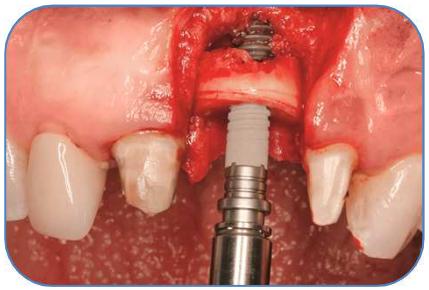
bonering® - education

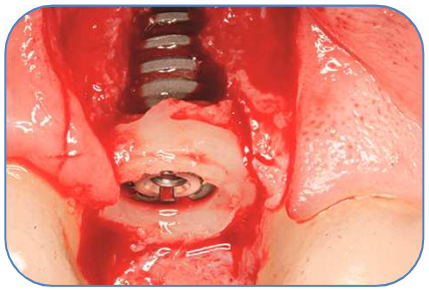
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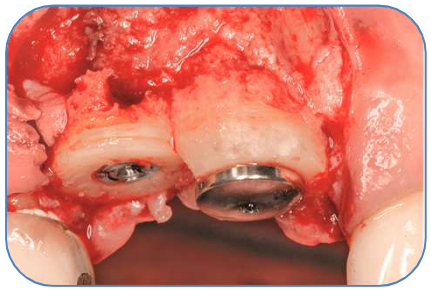
botiss academy

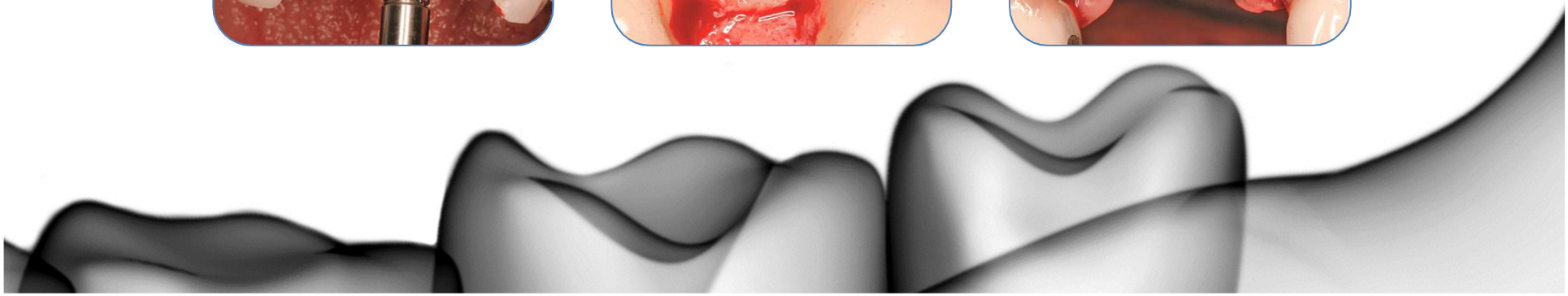
Dr. Giesenhagen and Dr. Yüksel

- lectures with hands-on
- clinical courses with live-surgery and hands-on
- hands-on-human-cadaver-course









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Thank You.

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