

Technological equipment in our practice

PIEZOTOME (Piezoelectric surgery)

An ultrasonic power generator designed for implant surgery and regular treatments



In the past with the cases of insufficient bone width (3-4mm), we cannot do implant placement instantly. We need to pick up the bone from another area, *ex. chin/ turberosity/ lateral ramus*, for rebuilding bony site. Blocked bone grafting is the common surgery to do bony width augmentation. After 6month of bone healing, we can do implant placement.

Nowadays we use PIEZOTOME to do ridge splitting for bony expansion (*with or without bone grafted materials*) in our practice. With this new innovation for doing the advanced surgical technic, we can insert implant in position within the same operation. The patients with compromised bone width can be received implants treatment with less trauma, save treatment time and expenses in the comparative with the old technic.



Case example with compromised bone width 3.5-4.0mm

- **Why this name?**
Piezo= electricity Tome= cut
- **What is it for?**
 - *Osteotomy (bone surgery)*
 - *Osteoplasty (bone reconstruction)*
 - *Sinus Lift, bone filling.*

The advantage of PIEZOTOME

- **More SAFETY**
 - *A selective cut = tissue distinction; only bone is cut, no risk of lesions to soft tissue.*
 - *Fast healing (no damage to tissue, thinness of the tips)*
- **More PRECISION**
 - *A neat and thin cut*
 - *A good visibility of the operating field (spray)*
 - *Acute tactile sense (low vibrations)*
- **More COMFORT**
 - *Powerful and silent device*
 - *No overheating of handpiece and tips*
 - *No effort when cutting*

Implantmed used in implantation surgeries



To get the most optimal therapeutical effects in dental implantation one of the things needed is appropriate equipment, produced in accordance with all the requirements concerning this type of treatments. Our implantation device (Implantmed - produced by W&H) can be used both in different stages of implantation surgeries and during preparatory surgical treatments. Nowadays implantation surgery requires great power and precise control of the microengine speed. The Implantmed device is equipped with a microengine (with an exceptionally high torque of 7 Ncm) and a very wide range of rotational speed (from 300 to 40 000 rotations per minute). The optimal rinsing provided by the system is one of the major factors deciding about the success of the implantation surgery - the flow of 100 ml of the cooling liquid per minute is a sufficient amount to protect bones and tissues during the surgery.

Beyond Whitening Accelerator **(Cold light technology)**

effective and quick teeth whitening



Beyond is the most technologically advanced teeth whitening method, considered nowadays as the safest and the most effective one. Old chromatoses (caused by tobacco, tea, coffee or medicines) disappear in the dentist's office after only thirty to forty-five minutes. Regular teeth brushing and cleaning may only remove part of the chromatoses; these, however, which are deeper in the tooth structure cannot be removed with the use of traditional home methods. They can be removed only by whitening materials. Surgeries with the use of the Beyond lamp have already been safely carried out in over one million patients. We use a whitening agent based on water ingredients (hydrogen peroxide H_2O_2), which does not destroy the tooth structure and contains an ingredient reducing teeth oversensitivity (SiO_2). Chromatoses disappear as if by magic wand at the same time from the upper and the lower jaw allowing to lighten the teeth from 5 to 14 shades in the Vita scale - the results are by 30% better than the overlay whitening method and definitely better than other systems. The effect of whitening remains up to two years depending on the diet and individual predispositions. In the Beyond lamp there were used: the most technologically advanced additional filtering system and 'cold light' of the accelerator, thanks to which the surgery is performed once and has no side effects in the form of tooth damage, especially of the enamel. The whitening agent is activated by the light with the wavelength of 480 to 520 nm emitted by the accelerator. The light is filtrated by over twelve thousand fiber-optic cables with the overall length of one mile and a special optic system - in order to eliminate the emissions of warmth and infrared and ultraviolet light. The first forty-eight hours after the surgery are called 'white hours' - one should not smoke or drink colored drinks during this time. Color stabilization comes after about two weeks - then it is possible to start the teeth reconstruction.

ScanX Digital Imaging System

We are the first dental office in Thailand to use this system.

Panoramic X-ray machine



Intra-oral X-ray machine



Wireless Portable X-ray machine



ScanX



*Intra/Extra-oral phosphor storage plates
+ Computer/ Software program*

We concern both quality of X-ray images and safety of patient in the step of X-ray processing for dental treatment. We provide 6 technological equipments for making our goal success.

1.) Paoramic X-ray machine:

Panoramic/ Cephalometric/ TMJ X-ray images

2.) 2Intra oral X-ray machines (on-site):

Periapical/ Bite-wing/ Occlusal X-ray images

3.) Wireless Portable X-ray:

Periapical/ Bite-wing/ Occlusal X-ray images

4.) ScanX.

5.) Intra& Extra oral Phosphor Storage plates

6.) Computer/ Software program

We use phosphor storage plates instead of conventional films for taking Intra& Extra oral X-ray in our dental treatment.

1.) The phosphor storage plates will be scanned by SCAN X and sending to the computer sites in each treatment room within a minute.

2.) In comparative with X-ray film processing, this technic will use lower radiation and lesser exposure time for patient in each time of X-ray taking.

3.) This technic will give the great quality of dental images which will help us to give more accurate information and treatment plans to our patients.



Electronic Apex Locators *used in root canal treatment*

We utilize advanced electronic root-length measuring technology to insure accuracy of instrumentation. Electronic Apex Locators provide very precise measurements of root length.



Air-flow effective and quick cleaning and polishing

Much faster than conventional brushes, rubber cups, pastes and Polishing strips. And much more through **without being abrasive**. Plaque, soft deposits and discolorations disappear quickly and painlessly. Fresh lemon flavor during and after treatment. Teeth feel smooth when running tongue over them. Patient feel wonderful about their teeth.





PerFect TCS (dispersive electrode)

PerFect TCS is a high frequency electrosurgery system, which helps to manage soft tissue with greater efficiency, greater precision and less bleeding than the common dental scalpel.

PerFect TCS

- removes unwanted tissue with ease
- reduces chair time by simplifying operative procedures and maintaining hemostasis
- provides unequalled cutting precision for superior clinical and aesthetic results
- allows problem-free healing
- two applications: cutting and coagulation
- autoclavable electrode sheaths

Other clinical applications:

- widening gingival sulcus
- crown lengthening
- exposing impacted teeth
- removing hyperplastic gingiva
- Frenectomy