“First, I created a simple and practical system to facilitate my job and the one of other professionals. Then I launched it on the market. And it was a success!”

Doctor Claudio Banzi (B&B Dental founder)

AT THE ROOT OF YOUR SUCCESS

B&B Dental is a leading Italian Company in the field of oral implantology. Specialized in the production of dental implants and bone regeneration material it was founded in 1992 by Dr. Claudio Banzi. B&B Dental is well-known for a continuous research and development of innovative and certified products, always absolutely original. Over 20 years of experience that make B&B Dental very appreciated by doctors and dental operators worldwide.
Guided implantology

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Implantology is the branch of dentistry dedicated to restoring missing teeth, in the way most similar to the natural one: by inserting implants where teeth have been lost, for various reasons. The above tells us that implantology is a surgical discipline aimed at prosthetic rehabilitation which cannot be achieved by excluding the prosthetic project.

Realising all this, correctly and with result predictability, depended greatly on the surgeon’s experience, expert eye and manual skill until only a few years ago. The operator’s manual skills and experience also affect the choice of implant characteristics in terms of diameter and length.

Information Technology (using dedicated software for implant prostheses design that acquire DICOM files and then returns three-dimensional images of the jaw bones) and robotics (using 3D printers) have recently changed the picture described above, allowing us:

- virtual planning of the surgical and prosthetic phase;
- realisation of a surgical TEMPLATE, with incorporated rigid guides, that allow insertion of the designed implant at the position, angle and depth as planned in the virtual project. The above is achieved using dedicated kits with burs that have a working part and a perfectly coaxial guide cylinder for the TEMPLATE’s rigid guide (Fig. 2).
- Execution of a pre-constructed prosthesis: By placing the surgical TEMPLATE on plaster models created previously, “plaster surgery” can be carried out and a temporary prosthesis can be created, that is designed virtually and can be placed in the patient’s mouth immediately after guided entry of the implants (immediate loading).

Today we are going to talk about Assisted Software Guided Implantology and assisted Software Guided Implant-prosthetics.

Once the implants have been positioned (Fig. 4), the assembly tools are removed, unscrewing the connection screws to the implant itself and the TEMPLATE, and viewing the correct implant position (Fig. 5). The operation ends in a classical manner with insertion of the healing screws (Fig. 6).

Control has been done after three months. (Fig. 7)

The technique above described, which is simple and safe to carry out on the condition that all the project phases have been carried out correctly, allows complex surgery to be carried out in relatively short times (60-90 minutes for a full-arch of 6/8 implants) with maximum predictability. Also, the possibility of having a pre-constructed fixed prosthesis that can immediately be fitted for the patient (where the right anatomic-functional conditions allow it) considerably improves not only the aesthetics but also healing of the bone-implant interface that takes place under functional loading.

The case

Woman aged 63 years with upper bilateral terminal edentulism; no contraindications contained in medical history. Firmly asks for fixed rehabilitation on implants. Nine months prior to the insertion of the implants, a bilateral large-scale Maxillary Sinus Floor Augmentation was carried out, using homologous bone grafts. This situation made us decide to perform Assisted Software Guided Implantology without immediate loading, by inserting six implants, three each side in the edentulous areas.

After inserting the surgical TEMPLATE into the patient’s mouth (it is anchored to the front teeth and making sure it is congruent and stable a necessary condition for carrying out the project) (Fig. 1), circular mucotomies were carried out using the guides, after which mucosa cylinders were removed. The middle surgical sockets on each side are prepared first of all (Fig. 2) where, using the TEMPLATE, the first two implants are inserted (Fig. 3), using specific assembly tools that are firmly anchored to the implants themselves. This procedure aims to stabilize the TEMPLATE permanently, preventing any accidental displacements.

Once the TEMPLATE is stabilized, the same procedure is carried out using the remaining guides.