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Prosthetic Experience in the Concept of "Strategic Implant®"

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Prosthetic Experience in the Concept of "Strategic Implant®"

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Abstract

The article presents a method of prosthetics on implants in the "Concept of Strategic Implant®". The advantages of this method over the usage of traditional implants are described. Special attention is paid to the need to comply with all orthopedic norms and rules that allow you to create the correct functionality of the dental system. The technique of prosthetics with a zirconia-based permanent circular prosthesis is revealed step by step, for which special parameters of the surgical and orthopedic protocol must be observed.

Keywords: Strategic Implant®, prosthetics, strategic positioning, BIPS®, overjet, overbite, circular zirconium prostheses, periimplantitis, bone augmentation, osseointegration, osseofixation, key orthopedic principles, support polygon, orthopedic planes and curves, AFMP, AFMI, APPI

Introduction

The state of dental health in a large number of patients remains at an unsatisfactory level, especially in older patients. The loss of a large number of teeth or their complete absence, as well as atrophy of the jawbones, leads to the inability to chew properly and this must be considered a severe violation of the general physiological state of the body.

Prosthetics with partial and complete removable dentures are performed often, but this type of dental work does not contribute to the satisfactory rehabilitation of the chewing function. It rather increases the problems of the patient.

Prosthetics using traditional, two-stage implants require a sufficient amount of jawbone and, to create this amount of bone, a long and expensive process consisting of several stages of bone buildup, waiting time for regeneration, the stage of implant installation and again waiting time for their "osseointegration". This process ends with prosthetics. All this takes up to two years until the patient has teeth. Especially elderly patients do not accept such long treatment time and hence, they remain untreated.

The work with the concept of the Strategic Implant® allows us to rehabilitate a patient with virtually every amount of bone tissue that he currently has and to install a prosthesis within three to five days from the moment the implants are installed, without bone buildups, without invasive surgery, without (unloaded) healing times, to quickly install a prosthesis with permanent fixation and with full functionality[4, 5].

Material and Methods

A 50-year-old man came to the clinic complaining of missing teeth in the lateral sections of the upper and lower jaw as well as the mobility of the remaining teeth in both jaws. The function of chewing and aesthetics had been severely impaired.

***Fig. 1-3**: The condition of the teeth before treatment*

The patient refused to have his teeth replaced with removable dentures. The patient also refused to undergo treatment using two-stage implants due to his unwillingness to build up bone and the need for a long rehabilitation period. The patient was offered by us treatment with the concept of the Strategic Implant® and he agreed to this treatment.

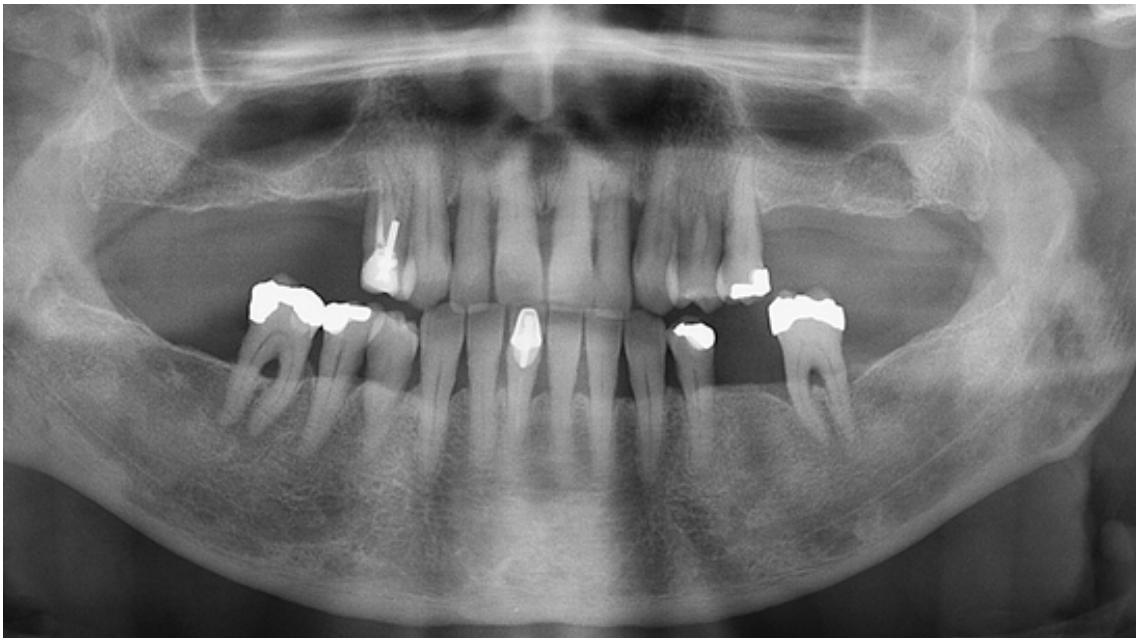

***Fig. 4**: OPTG before treatment. The indication for the removal of all teeth was given due to the loss of attachment in an amount of 20 % or more on every tooth that had remained. (9th IF® Consensus Document, International Implant Foundation, Munich, 2021)*

On the day of the operation, all the teeth in the upper and lower jaws were removed. The patient's principal agreement for this treatment had been obtained and all necessary documents were signed. The alignment of the alveolar bone of the upper and lower jaw was performed. The sockets of the extracted teeth were resected to two thirds of the depth and a general bone resection was performed. This is necessary to prevent uncontrollable bone atrophy of the jawbones.

According to the "Strategic Implant®" protocol under infiltration anesthesia, it was established: In the upper jaw, in the main strategic positions, these are the areas of the canines and seventh teeth, and in additional areas. A total of 14 implants were installed:

- in the area of teeth 1.7 and 2.7 according to IF® method 10
- in the dental area 1.1, 1.2, 1.3, 2.1, 2.2, 2.3 - according to IF® method 7A
- in the dental area 1.4, 1.6, 2.4, 2.6 - according to IF® method 8

10 implants were installed in the lower jaw. Key strategic positions:

- in the dental area 3.3, 4.3 - according to IF® methods 3 and 4
- in the dental area 3.6, 3.7, 4.6, 4.7 - according to IF® method 5A

Additionally, implants were installed in dental areas 3.4, 3.5, 4.4, 4.5, according to IF® method 4. Thus, 14 implants were installed on the upper jaw and 10 on the lower jaw.

What tactics and techniques should be used when placing implants? The BIPS® (Bone Implant Prosthetic System) which we construct and install must be designed adequately to withstand chewing forces and all other forces. Therefore, it is essential to strictly adhere to the principles of implant placement within the "Strategic Implant®" concept.

The concept of "Strategic Implant®" strictly regulates the mandatory placement of implants in key (strategic) positions. These are the areas of teeth 3 and 7 in both the upper and lower jaws.

Without them, our entire BIPS® cannot adequately withstand masticatory forces. The standard installation of implants according to the "Strategic Implant®" concept involves placing 12 implants in the upper jaw and 8 in the lower jaw. The number of implants can be increased if necessary.

This is relevant when planning immediate permanent prosthetics using a zirconia-based circular prosthetic construction, as such a prosthetic work piece consists of a very rigid structure that cannot withstand overload or torsional forces. Another crucial factor in choosing a protocol for a permanent structure based on zirconia or metal-ceramics is the degree and quality of bone reduction after tooth extraction and the alignment of the alveolar ridge. This helps to prevent bone tissue atrophy. In the absence of these factors and at the clinic's discretion, a protocol for placing a primary semi-permanent prosthesis made of metal-acrylic or PMMA is being used, and after a period of time (not less than six months), this temporary prosthetic construction is replaced by the permanent one. This however requires more appointments and the costs are higher for the patient.

Next, impressions were taken using transfer caps and silicone impression material, and the relationship between the jaws and the occlusal height was determined.

During the modelling of the structure, all the key orthopedic parameters that must be adhered to when manufacturing a prosthesis within the "Strategic Implant®" concept were strictly followed[5]. These will be discussed further.

The prosthetic workpieces were fixed using permanent Fuji Plus cement. The prosthodontic work was successfully completed.

The patient was fully satisfied with the results of the prosthetics. A comprehensive examination of the patient's dental system was performed: external examination, panoramic radiography and computer tomography. Occlusal contacts were checked statically and dynamically, as well as their compliance with the requirements of the Strategic Implant® protocol[5].

***Fig. 5**: Finished upper jaw prosthesis*

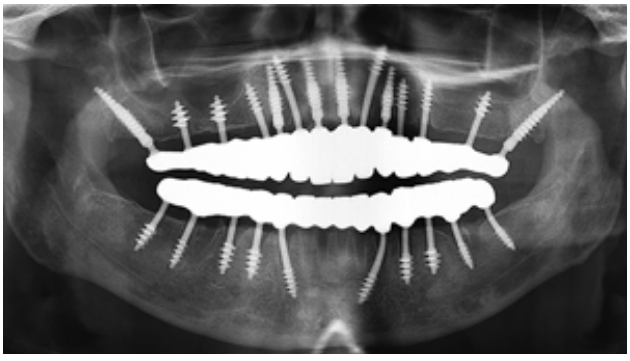

***Fig. 6**: OPTG after fixation of prostheses*

***Fig. 7-8**: Prostheses in oral cavity on day 4 after fixation*

The control checkup of occlusal contacts has been carried out in the area of the first and second premolars. Special attention was paid to the absence of contacts on the slopes of the cusps of the chewing teeth and the absence of contact in the frontal region, taking into account the requirements of the Strategic Implant® protocol for the vertical ratio of the jaws in the sagittal direction (Overjet) of no more than 2.5 mm and for the vertical overlap of the lower teeth with the upper ones (Overbite), which should be zero[2, 5]. All parameters have been adjusted. The patient was given recommendations for proper bilateral chewing.

***Fig. 9-10**: Prostheses in oral cavity after 2.5 years*

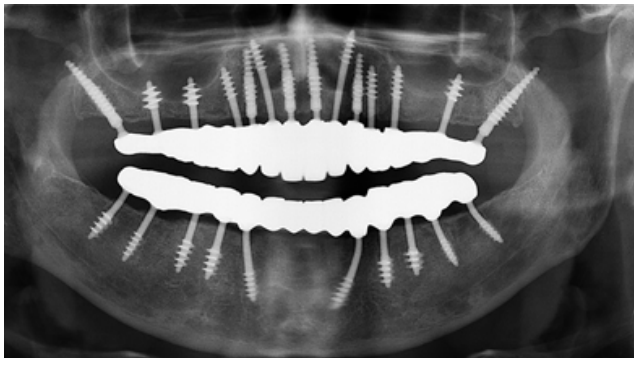

***Fig. 11**: Control OPTG after 2.5 years*

Thereafter, the patient came for follow-up examinations once a year. There were no complaints. The adaptation to the bilateral type of chewing was successful. The patient very carefully observed oral hygiene and used a Waterpick® device. There was practically no bone tissue atrophy during the observation period.

Results

As the result of prosthetic work on the Strategic Implant®, the patient's chewing function was restored in a short time (three days) using circular zirconium prostheses based on permanent Fuji Plus cement, installed on 14 implants in the upper jaw and on 10 implants in the lower jaw. Before the implants were installed in the areas of the removed teeth, the edges of the alveolar sockets were reduced to a 2 mm bone thickness. This procedure eliminates post-operative bone atrophy. The patient expressed great satisfaction with the results of prosthetics. The control check-up and panoramic images 2.5 year after the implant placement showed the reliability of the BIPS® of the upper and lower jaws, which in turn indicates the correct installation of implants, competently manufactured circular prostheses in compliance with all orthopedic parameters in the Strategic Implant® concept.

Discussion

Today, the very unfavorable old method of implantology, the use of two-stage implants that were designed for osseointegration, is still widespread. There are no good reasons anymore for this. The methods of their installation have long been studied and taught in medical universities. But there are more disadvantages to using these implants than advantages. And the main one is based on the very principle of fixing the implant in the bone, namely, osseointegration, that is, the process of connecting bone tissue with the rough surface of the implant. And the main condition here is the presence of a sufficient volume of bone. But most patients do not have enough of it. And then patients are offered bone augmentation procedures, which take a long time, are traumatic, require additional money, and the result is unpredictable. As a result, the duration of the process of bone growth, achieving osseointegration and finally prosthetics reaches one year. But even after the completion of treatment, after two, three or four years, many patients face another problem in the form of periimplantitis, which affects more than half of all installed two-stage implants[3, 4].

In the "Strategic Implant®" concept, which is based on the osseofixation of polished single-piece "Corticobasal®" implants (Manufacturer: Simpladent GmbH, 8737 Gommiswald, Switzerland), there is no need to build up the bone and wait for osseointegration. The implant is fixed in the second cortical bone plate and is immediately able to take on the chewing load[2]. It is also extremely important to take the fact into account that polished "Corticobasal®" implants are not susceptible to periimplantitis[3].

There are large differences between the older (obsolete) method of osseointegration and the modern method of oral osseofixation (the technology of the Strategic Implant®). The technology of the Strategic Implant® was developed in order to overcome all disadvantages of conventional oral implantology and its devices. This development was highly successful as the following table shows. This table explains the advantages from the point of view of the treatment provider:

No.	Conventional Implant (Ankylosed / Osseointegrated)	Strategic Implant®
01	Develops periimplantitis (a huge medical disadvantage)	Never develops periimplantitis
02	Requires unloaded healing time	Usage in immediate functional loading protocol as a rule
03	Often requires bone augmentation	Never requires bone augmentation
04	Aesthetics are created by bone augmentation	Aesthetics are created by bone reduction
05	A period of healing time is typically required after tooth extraction	Implants are placed into fresh extraction socket and loaded immediately
06	Load transmission in the spongeous bone areal after "osseointegration" has happened	Load transmission into highly mineralized bone areas only
07	Due to the rough surfaces, chances for early implant loss and infection are given	Due to the polished design of the implant, no primary infections are possible
08	The prosthetic work piece will be at the area of the implant (emerging profile)	The position of the prosthetic work piece is chosen independently from the area of implant anchorage
09	Due to the size of the implant, the intraosseous supply of blood is harmed	Due to the minimal amount of bone replacement, the intra-osseous blood flow and physiological properties of bone are not changed
10	Frequent loosening of prosthetic screws or fractures of the structure of the implant or the abutment, due to biomechanical incompatibility of osseointegrated / ankylosed implant bodies in the elastic jaw bone	Single-piece, elastic design of the implant allows safe and stable integration

***Table 1**: Shows ten significant advantages of the Technology of the Strategic Implant® **compared to all other implants on the market (Method of osseointegration)**.*

The following table shows the advantages of the "Concept of Strategic Implant®" from the point of view of our patients:

No.	Strategic Implant®
01	Everyone can be treated (no patient selection)
02	After only three days patients can return into their normal life, with new fixed teeth
03	Everyone has enough bone if this technology is used; nobody has to undergo frightening, risky and dangerous "bone augmentation procedures"
04	The Strategic Implant® fits to all bone situations
05	The implants are infection-free
06	All realistic wishes regarding aesthetics can be fulfilled
07	The masticatory function will be fully restored and the system is reset: therefore, no or almost no problems with adaptation to the new teeth are to be expected. The phase of adaptation is very short.

***Table 2**: Highlights seven significant advantages for patients that are critical for their decision to undergo the treatment with the "Strategic Implant®".*

An important component of the success of prosthetics on implants in the Strategic Implant® concept is the exact observance of the orthopedic protocol, which includes compliance with a large number of specific rules and laws, in which non-compliance can lead to functional failure of prostheses and loss of implant fixation. In most medical dental universities, these issues are not considered, and this often leads to the fact that doctors who start working with this method do not understand the specifics of this method, get negative results and recognize the concept of "Strategic Implant®" as insolvent[7].

Orthopedic literacy, understanding the laws of osseofixation and bone remodeling, along with proper surgical installation, requires specialized training for dental surgeons and orthopedists. This knowledge is fundamental for the successful application of the "Strategic Implant®" concept.

It is essential to have knowledge and understanding of key orthopedic principles such as:

- The concept of the supporting polygon, which aids in accurately designing the boundaries of the future prosthesis and properly distributing chewing forces. Creating a palatalized occlusion is a part of the concept of having most or all occlusal contact areas between the arches inside of the supporting polygon.
- The main orthopedic planes and curves, such as the Frankfurt Horizontal, the Camper Plane, and the Occlusal Plane, as well as the compensatory curves of Spee and Wilson.
- The primary classes of jaw relationships in Angle's classification determine the differences in the formation of occlusal contacts.
- The laws of uneven jaw atrophy impose specific considerations when creating circular prostheses on implants.
- The absence of contacts in the anterior region and the relationship of the jaws in height and their relationship in the sagittal plane.
- The functional Angle of mastication by Planas (AFMP), which in this concept transforms into the functional angle of Mastication by Ihde (AFMI), ensuring transverse movements of the lower jaw relative to the upper one without blocks and limitations, thereby forming a bilateral chewing pattern.
- The Anterior-Posterior Plane by Ihde (APPI) creates spatial equivalence of the lateral sections of the jaws during the movement of the lower jaw in the sagittal direction.
- All of the above are key constants that must be considered when planning and creating prosthetics on implants, which are fundamentally based on osseofixation. Several other factors need to be taken into account, including the number of teeth to be prosthodontically treated, the shape of the dental arches, the way the prosthesis fits against the mucosa, and the choice of prosthetic material.

These laws and factors must be understood and strictly adhered to, as deviating from the protocol can result in the loss of both the prosthesis and the implants.

Work within the framework of "Strategic Implant®" should only be carried out by certified specialists who have completed the mandatory training cycle and have confirmed their knowledge by passing a qualification exam.

Conclusion

Based on the example of the described case and on many years of personal experience with the Strategic Implant® technology, all the advantages of using the „Strategic Implant®" method are more than obvious. This technology has overcome all the disadvantages of traditional two-stage implants.

When working in this new concept, there is no need to perform risky bone augmentations and to accept long waiting times for bone augmentation[1]. The shown technique makes it possible to achieve full functionality and patient satisfaction. Periimplantitis never occurs if the Strategic Implant® is used[9].

References

1 Dobrinin O., et al. "Immediate-functional loading concept with one-piece implants (BECES/ BECES N /KOS/ BOI) in the mandible and maxilla-a multi-center retrospective clinical study".Journal of Evolution of Medical and Dental Sciences 8.5 (2019): 306-315.

2 Ihde S, Ihde AA. Diagnostics and treatment plan for the work with the strategic implant®. Munich: Intl Implant Foundation Publishing 2017

3 Stefan Ihde., et al. "Peri-Implantitis: a new definition proposal based on unnatural spatial arrangement and late mechanical coupling between two cortical bone layers during osseointegration phase. Part I". Applied Science 12 (2022): 10.

4 Lazarov A. "Immediate functional loading: Results for the concept of the Strategic Implant®". Annals of Maxillofacial Surgery 9 (2019): 78-88.

5 Ihde S and Ihde A. "Cookbook Mastication". 6th English Editions 2022, International Implant Foundation Publishing, Germany

6 Patel K, Madan S, Mehta D, Shah SP, Trivedi V, Seta H. Basal implants: a means of rehabilitation of atrophic resorbed maxilla and mandible - a prospective study. Ann Maxillofac Surg 2021; 11:64–9.

7 Jani M, Gaur V, Doshi AG, Patel K, Pałka Ł. Clinically based classification and positioning indication for single-piece compressive implants placement in regard to extraction socket. Healthcare (Basel) 2022; 10:598.

8 Antonina I., Lazarov A., Gaur V., Lysenko V., Konstantinovich V., Gombkötö G., et al. Consensus on 16 recognized and clinically validated methods and sub-methods for corticobasal oral implant placement. Ann Maxillofac Surg 2020; 10:457–62.

9 Ihde S., Sipic O., Ihde A. A Prospective Long-Term Study on the Strategic Implant® - This Study Changed the Dental World and the „Gold Standard" in Oral Implantology. Experience-based and evidence-oriented Corticobasal® Implantology (EECI), Vol. 19, No. 1, International Implant Foundation Publishing, 2025