Acta Scientific Otolaryngology (ISSN: 2582-5550)

Volume 4 Issue 10 October 2022

Research Article

Restauration of a Patient Case After Multiple Losses of Conventional Oral Implants: Case Report and Comments on the Continued Use of Traditional 2-stage Implants

Ihde Antonina[1,2]*, Sipic Olga[2,3] and Ihde Stefan[2,3]

[1]*International Implant Foundation, Head of Dental Implants Faculty, Germany*

[2]*Visiting Honorary Professor, Jaipur Dental College, Department for Prosthetics, Maharaj Vinayak Global University, Jaipur, Rajasthan, India*

[3]*International Implant Foundation, Evidence and Research Department, Germany*

***Corresponding Author:** Ihde Antonina, International Implant Foundation, Head of Dental Implants Faculty, Germany.

DOI: 10.31080/ASOL.2022.04.496

Received: August 28, 2022

Published: September 27, 2022

Abstract

The occurrence of peri-implantitis (PI) in conventional dental implantology is an unsolved and even unsolvable problem which affects a vast and increasing number of patients. Once PI starts significant amounts of jaw bone are lost in a short time. There is no treatment for PI, hence treatment providers can only accompany the patients on the "road downhill".

The problem remains until, - mostly based on the patient's initiative- the implants are removed. The initial treatment provider does not openly reveal to the patients that the only reason for the problem is the choice of the wrong implant design, i.e. the wrong implants brand.

This article shows how a typical patient case after multiple implant losses can be rescued within a few days with the help of the Corticobasal® implant. This corrective intervention can be done by authorized and trained treatment providers even in an immediate functional loading protocol.

Keywords: Peri-Implantitis; Bone Loss; Therapy; Immediate Functional Loading; Choice of Implant Category

Introduction

The occurrence of peri-implantitis (PI) in conventional dental implantology is an unsolveable problem which affects a vast and increasing number of patients. Manufacturers of traditional 2-atate implants blame recently "immunological reasons" for the occurrence of this "disease". They neglect the fact, that 2-stage (2-piece) implants are in most cases simply too large in diameter and in length, and that the rough (initially endosseously placed) implant surfaces get colonialized by bacteria as soon as bone loss starts. PI is in the reality a chronic opportunistic infection without any chance for healing nor for regeneration, until the implant is finally removed [1,2].

The onset of regular PI is seen 2-3 years after implant placement and after the implant is successfully "osseointegrated" [3]. In cases where more than 5 implants per jaw are inserted "fast-track PI" is observed: in such cases already after 12 months PI is seen in 80% of the cases. The reason for this true "pandemic" of PI is that after placement of such a big amount of implants, the subsequent amount of remodelling is much higher and bone loss (actually it is rather a bone-optimization) due to this remodelling happens faster and more extensively [4].

Although such alarming figures are published frequently in literature, the community of traditional implantologists keep on

working in their traditional way. Only a few of them are ready to learn new techniques of oral implantology, such as the technology used for Corticobasal® implants. A number of studies with large amounts of implants included have shown, that these implants do not lead to PI [5-8]. Besides this they can be used in an immediate loading protocol and where they are used, bone augmentations are never a part of the treatment plan. This means clearly, that this technology combines important advantage without having any disadvantages.

In this article we show how a case with severely destroyed jaw bones due to PI, can be restored within a few days and in a very simple manner.

Material and Methods

A 45 year old male patient, heavy smoker, requested help in our clinic after suffering from PI for many years. Most of the implants had been lost already. The treatment provider has left however 3 implants in the lower jaw to prolong the time-span between initial treatment until total failure. By doing this the treatment provider bears the responsibility for the vast amount of damage which these unsuitable 2-stage implants have created.

Large bone defects, generalized atrophy and a serve Angle Class 3 jaw relationship were the three major difficulties provided by the

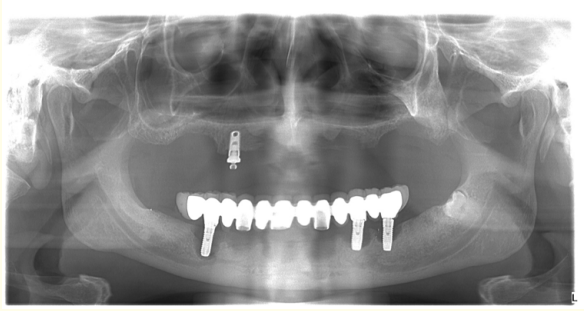

Figure 1: Panoramic overview on the patient's jaws. We see in both jaws severe destructions (crater-like bone loss and confluent craters leading to horizontal/generalized bone loss) of the jaw bones, which were created by "2-stage implants" affected by PI. The implants should have been removed much earlier.

Figure 2a: The lateral (cephalometric) radiograph revealed a severe Angle Class 3 jaw relationship at the presented height of the bite.

Figure 2b: After removal of the implants and the bridge it became clear that during 6 years of use three out of six implants had been lost ad removed from under the bridge. The remaining three implants had failed long ago, but they were kept in to avoid that the true disaster reveals itself to the patient. The treatment provider had tried hard to get the case out of the period of guarantee. As also in the upper jaw 7 implants have failed, a total of 13 implants failed within 6 years. This cases sheds severe doubts on the statistics which the big implant manufacturers publish regularly, as these statistics show excellent long-term results even after 10 years and more. It seems that we cannot trust the literature.

patient, figure 1, 2a, 2b. All implants were removed and in the same appointment a total of 10 implants were placed in the upper jaw and 7 implants in the lower, figure 3. Right after this the impressions were taken and the inter-jaw relationship was registered. The height of the bite was registered according to standard parameters.

Figure 3a: A combination of BCS (single piece Corticoasal®/ BCS® implants) and TPG® Uno (single piece polished compression screws) were placed in the upper and lower jaw, using the 16 Approved Methods of Implant Placement for Corticobasal® implants [9].

Figure 3b: Clinical view on the implants in upper and lower jaw right after placement. Areas where implants were freshly lost have been avoided.

Results

After a successful tooth-try-in two circular full zirconium bridges were manufactured and cemented with Fuji plus permanent cement.

The bit was raised with the help of the two bridges and this allowed to some extend a decrease of the ANB-angle and to support the upper and lower lip, figure 4.

The patient resumed normal masticatory activity on the day of cementation and he expressed large gratitude to the surgeon and the prosthetic treatment providers which have done this treatment within three days only.

Discussion

In today's oral implantology, as rule, implants are chosen which are too large for most of the jaw bones[1]. This path of treatment is supported by (third-party-funded) universities which can receive funds not only from implant manufacturers but also from manu-

Figure 4: The postoperative cephalometric picture shows that a good support of the upper and lower lip has been achieved and that the bite was significantly raised through the bridges. The profile immediately normalized and the difference is visible when Figure 2a and Figure 4 are compared.

Figure 5: Clinical view after cementation of the two circular zirconium bridges. The upper arch was placed significantly in front of the upper alveolar crest. Nevertheless both frontal groups cannot touch each other during occlusion, mastication and protrusion. This concept of treatment has been described by Ihde and Ihde [10].

facturers of bone augmentation material. Working with too large implants doubles their income.

In our case. We have used thin and polished Corticobasal® and compressive implants in combination to make best use out of the remaining bone (Manufacturer: Simpladent GmbH, CH-8737 Gommiswald, Switzerland). Both implant types provided a 2 mm mucosal penetration zone (polished) which allowed us to place the implant everywhere were we wanted it and without any bone augmentation. The mode of function is however different in the 2 types: Corticobasal® implants anchor in the 2nr or 3rd cortical of the jaw bones, they actually partly penetrate these cortical in the upper and lower jaw. The surgeon had chosen resorption-resistant bone areal for the placement wherever possible. Polished compressive implant gain stability through the compression of spongious bone as well as through cortical anchorage. Both implants together allow to carry out such a treatment within a few days in an immediate functional loading protocol.

The alternative treatment to our approach would have been removal of the implants, to wait for the bones and soft tissue healing and finally to try bone (block) augmentation and Sinus lifts to generate vertical and horizontal bone. Hardly any patient is willing to undergo this hardship. And that is the reason why patients keep on suffering with the failing 2 stage implants for months and years, while their jaw bone melts away in a massive, and often confluent infection. Even if a patient would undergo this procedure, there is no guarantee that the same problems will not happen again after a few years only.

The question must be raised, why still so many implant practitioners prefer to use the outdated method of "osseointegration" and placement of implant in the 1st cortical only. It is well known that this cortical is prone to resorption (atrophy) even without implants which add PI to the natural process. A good part of the answer is, that the universities will never blame anyone if PI "occurs", as the treatment providers in these institutions has been trained (or ordered) to think and to tell that PI is "unavoidable" and not the fault of the treatment provider.

A closer look behind the scenes of the implant profession makes clear, why the Corticobasal® technology is not taught in most European universities: third party funding (official and non-official) limits most universities to decide freely about the content of their teaching and about the products which are applied to the patient. This means that the university teaching is at least "blended". The universities seemingly do not to respect the interests of the patients and they neglect progress in the profession, unless they are heavily payed for changes. The behaviour of these institutions is without question wrong, especially when we consider that these institutions are actually payed with the tax-payer's money.

The problem is well known however [11]. As a result todays dental universities (actually better designated as "dental schools") are preaching a medical monotheism (and actually often useless treatments with only short term outcomes in general) instead of opening the eyes of their students to all options and delivering a broad and modern spectrum of knowledge. Another result is the lack of progress in dental treatments in the general practice. In most dental subjects the teaching didn't change during the last 50 -100 years. Practitioner which find out later in life (by chance) about the true possibilities, tend to revolt against the old teaching [12] and in return "interested parties" try to keep them silent.

The teaching of today's universities is based on their own publications. Although we know today that a shocking number of around 50% (at least) of these publications are deemed to be wrong or false [13]. This fact is quietly accepted however, since publications (as such: publish or perish) are necessary steps for advancements in an academic career.

Conclusion

PI is a severe and dramatic development around traditional (2-stage) dental implants with rough surfaces. Such implants should be avoided, because once PI appears the development cannot be treated/stopped and it leads to severe bone loss and finally to implants losses.

When applying the principle "primum nihil nocere" large diameter implants and rough surfaces must be avoided.

Immediate oral rehabilitation of cases with profound PI is possible if polished, cortically anchored implants are used and the 16 approved methods for placement of these implants are applied.

Bibliography

1. 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.

2. Ihde S., *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 II". *Applied Science* 12 (2022): 5589.

3. Derks Schaller., *et al*. "Peri-implantitis - onset and pattern of progression". *Journal of Clinical Periodontology* 43.4 (2016): 383-388.

4. Passoni., *et al*. "Does the number of implants have any relation with PI disease?". *Journal of Applied Oral Science* 22.5 (2014): 403-408.

5. 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.

6. Pałka Ł and Lazarov A. "Immediately loaded bicortical implants inserted in fresh extraction and healed sites in patients with and without a history of periodontal disease". *Annals of Maxillofacial Surgery* 9 (2019): 371-378.

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

8. Gosai H., *et al*. "Versatility of Basal Cortical Screw Implants with Immediate Functional Loading". *Journal of Oral and Maxillofacial Surgery* (2021).

9. https://www.implantfoundation.org/en/consensus-16-approved-methods-2021-menu-en

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

11. Jon Jureidini and Leemon B McHenry. "The illusion of evidence based medicine". *BMJ* 376 (2022): o702.

12. Abhishare Reddy N., *et al*. "Goodbye Osseointegration (Statement published through the International Implant Foundation, Munich)". *Cranio-maxillofacial - Implant Directions* 16 (2022): 3-11.

13. Richard Horton Offline: What is medicine's 5 sigma? www.thelancet.com 385. 1380.