The immediate implantation, an ordinary procedure, or a major risk in our practice.

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Abstract

The immediate implantation, an ordinary procedure, or a major risk in our practice. In this case, we face a second challenge, which is to be considered as a primary one, at the best of it: the pros and cons of these decisions, which might lead to the success or the failure of the surgical interventions. We as doctors have to choose wisely between the options of one or more sessions, according to the specific conditions of the cases. Our aim is to argue pro one session immediate implantation, despite of the primary diseases such as bone destruction due to the presence of cystic masses or other formations. We include here even immediate loading of the implants, even though these are two different concepts. So the theoretical question but basically a practical one is: should we consider this approach of solution? Or the taken risk might jeopardize the success of the surgical intervention.

Introduction:

The primary objectives of immediate implant therapy are to decrease treatment time and the number of surgical procedures, while improving overall patient satisfaction. Lazzara1 reported the first immediate dental implant placement, and Wohrle2 first detailed immediate provisionalization of an immediate implant. In a systematic review, Lang et al3 reported an overall success rate of 98.4% for immediate implants.

It is axiomatic that thorough site evaluation and patient selection are crucial to the success of immediate implant treatment. Based on the dental implant literature, this paper proposes a risk profile that can be used to evaluate the recipient site prior to immediate implant therapy. The key elements used in the profile should be helpful when selecting cases that will mitigate the risk of immediate implant surgical complications, including failures. The main components of a risk profile can be broadly stratified into four categories: hard tissue evaluation, soft tissue evaluation, systemic factors, and compliance.

Conclusion:

The risk assessment tool presented here is simple and effective. The risk profile is based on peer-reviewed literature and designed to help clinicians determine whether an immediate or delayed implant procedure should be performed following tooth extraction. With careful assessment and proper screening, immediate implant therapy is a predictable treatment approach. Attention to detail is crucial to the success of immediate implant treatment. During initial consultation, patients should be educated about their role in achieving predictable outcomes. Dietary, physical activity and hygiene restriction (at the proposed site) should be thoroughly reviewed and readdressed during postoperative appointments to minimize dental implant complications. In addition, patients will require regular periodontal maintenance after implant therapy to maintain peri-implant health.

The four-factor, presurgical risk profile presented here allows comprehensive case evaluation for immediate implant treatment. Risk assessment helps clinicians select appropriate cases, thus minimizing complications and failures. Clinicians should perform immediate implant placement only in patients classified as optimal or low risk to maintain good surgical and esthetic outcomes. A staged approach — including bone grafting, with or without soft tissue augmentation — should be performed in cases with a high risk profile.

Among these four categories, buccal plate intactness in the hard tissue group, and periodontal phenotype in the soft tissue category are key determinants of risk. The final two parameters (systemic/host factors and compliance) must also be met before proceeding with immediate implant treatment.

During case evaluation, if the profile parameters are spread across all risk categories, greater weight should be given to hard tissue parameters (as opposed to soft tissue factors). However, within the hard tissue category, socket morphology and buccal plate intactness are critical when compared to other parameters. It would be ideal for all hard tissue parameters to be in the optimal or low risk category before proceeding with immediate implant treatment. On the other hand, even if the soft tissue parameters are not optimal, they are modifiable and can be corrected during the immediate implant procedure.