INTRODUCTION

The classical method of implantation has already been analyzed and documented, this containing at least three phases:
- surgical stage: implant insertion;
- healing stage of three up to six months;
- prosthetic stage.

Therefore, between the period of implementation and the prosthetic one, after the classical method, there is a period of three months up to one year, depending on the indications, bone structure and technique chosen.

Logically, there is the question whether we can shorten this period of time and in what manner.

Many doctors practice for many years the post-extraction implantation technique. This particular method gives very good results equivalent to those obtained by the classical technique, provided that the indications and surgical protocol are observed.

A certain number of rules must be obeyed within the protocol of a post-extraction immediate implant in order to obtain a positive result.

After having done the local anaesthesia, I proceeded to tooth extraction. It should be atraumatic in order to preserve the bone capital. The post – extractional site should be cleaned in order to remove any possible pathological tissue. Curettage stimulates the socket walls, releasing the bone cells responsible for healing.

Alveolar wall integrity must be verified because the lack of a wall and especially of a vestibular wall is a source of failure.

The next step is analyzing and determining the position and orientation of the implant in relation to the tooth root removed in order to obtain an optimal result from aesthetically and biomechanically point of view. The implant axis is not always compatible with the root axis. The implant position is dictated by functional and aesthetic imperatives. It is very important to achieve good primary stability (minimum 15Ncm) of the implant, thus justifying the interest to drill beyond the anatomical apex, there where this is possible. In some cases, it is necessary to use bone addition materials, as well as membranes because the implant diameter is inferior to that of the diameter of the tooth extracted.

CASE PRESENTATION

In order to present this method of therapy, of the
studied cases, I chose to present a case that illustrates the benefits of the immediate implant extraction method.

The patient is 52 years old, in good health condition with no counter-indication for the implant treatment.

**Figure no. 1. Initial orthopantomography**

The orthopantomographic analysis shows that in the left maxillary, respectively at the level of 26 and 27 teeth, there is a bone resorption in addition to an infectious process at the level of the first molar mesial root that is at the level of 26.

Scanner examination allowed analyzing the socket anatomy, alveolar bone thickness, the amount of bone apical, total height available, giving thus the possibility to choose the implant size.

This exam is mandatory for all interventions that are made near the lower dental nerve or maxillary sinus. In addition, the scanner is essential in all cases, where the panoramic radiography leaves unclear the anatomy of the areas where the implant will be placed, in particular regarding the available bone width.

**Figure no. 2. Scanner section allowing the analysis of the areas meant for implantation**

I proceeded to the extraction of 26 and 27 after cutting the existing prosthetic work. The sectioning was performed in the area of the canine 23, which is an intermediate bridge as one can observe on the orthopantomography.

I tried to make the extraction as atraumatic as possible, to preserve the integrity of alveolar bone plate. In order to do this, I used periotomes to section the periodontal ligament fibbers. I favoured the mesio-distal dislocations to the vestibular-lingual ones, not to damage the cortical bone.

After extraction, I prepared the socket. Socket curettage aimed at removing the pathological process observed on the orthopantomography at the level of the mesial root of the tooth 26. Afterwards, I started the alveoli lavage with saline.

I then proceeded to prepare the implant site by drilling successively according to the analysis made on the scanner. I introduced Wital implants - in the area of 26, I made an implant with the diameter of 4.3 mm and in the area of the tooth 27, an implant with the diameter of 4 mm. Implants were inserted in areas 24 and 25 where an older edentulous existed.

I obtained a superior primary stability of 30Ncm, which allowed me to resort to putting the immediate provisional prosthesis.

In order to achieve the provisional prosthesis, provisional prosthetic abutments were installed. I took the imprint that was sent to the laboratory. 24 hours later, I fixed this prosthesis.

**Figure no. 3. Orthopantomography observing the implants inserted in the positions 24, 25, 26 and 27**

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**Figure no. 4. Provisional prosthetic work**

Within 24 hours, the patient was solved aesthetically, functionally and prosthetically.

After a period of three months, the provisional prosthesis was removed. Final abutments were installed. The diameter of the abutments was of 3.5 mm in order to limit the vertical and horizontal bone lysis that occurs around the implant. This is the concept of “platform-switching” which consists in connecting an implant with a given diameter to an abutment of a reduced diameter. This procedure seems to prevent the vertical and horizontal bone lysis observed in normal conditions.

After installing the titanium abutments, I started to make the imprint, according to which the final ceramic work was made.

**Figure no. 5. Prosthetic abutments made of titanium**
Figure no. 6. The patient with her final prosthetic work

Figure no. 6. Orthopantomography emphasising the implants and the final prosthetic work

CONCLUSIONS

The extraction with immediate implant has many advantages which allow especially the optimization of implant healing, the decrease of the number of interventions and of treatment duration.

This method seems to result in a more rapid bone healing which might explain the vascularisation of the bone site caused by extraction and the minimal heating caused by drilling.

The aesthetic result is very good in most of the cases because the implant is situated in the origin position of the natural tooth.

If there is an indication, the simplicity of this method allows foreseeing this eventuality before any extraction indications in the everyday practice. The advantages of the method and the results obtained plead for this.

At the same time, this technique should be used after a detailed clinical examination and by observing a strict protocol, which if not obeyed, it may lead to a failure of osseointegration or aesthetic integration.

BIBLIOGRAPHY

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