The Task

Proper management of hard and soft tissue has proven to be a continued challenge in an extraction procedure prior to implantation. In most cases, an immediate or even delayed implantation without bone restoration is not possible. To reduce the risk of damage to the tissue, an absolute atraumatic tooth extraction technique is required.

Method and Materials

A new method utilizing a patented technique has been developed for extracting single and double-rooted teeth. The Easy X-TRAC® System consists of 3 different sized drills and 3 different sets of extracting screws along with a specially designed extractor and protection plates to lift the tooth out of the socket without any rotary or tilting movement. Treating a majority of our patients with this system over a 3 year period, we were able to preserve the hard and soft tissue, leading to successful immediate implant placement.

The Procedure

Prepare the root canal using the X-Trac® Drills.

Place the self-cutting X-Trac® Screw in the root canal by using the X-Trac® Ratchet.

Position the Protector filled with impression material on the tooth row. Guide X-Trac® Screw through the hole.

Place the jaws of the Easy X-Tractor® between the surface of the Protector and the head of the Screw.

Turn the handle screw in the back of the Easy X-Tractor®. The jaws open up and pull the tooth using vertical force only!

Remove the Easy X-Tractor®, lift off the Protector and easily remove the tooth.

Completed extraction.

Insert a 5.5 Implant without making a flap!

Results and Conclusion

The aim was to develop a new extraction technique for single and double rooted teeth as a pre-implantological procedure. Particular attention was paid to the protection of all the adjacent hard and soft tissue (eg. the buccal lamella in the maxilla).

The extraction procedure only requires a vertical motion to pull the tooth and disperse the pressure of the extraction process on the adjacent teeth, thereby avoiding widening of the alveolus and minimizing the risk of damage to adjacent bone structures and bone loss. This new procedure eliminates the use of root elevators, forceps and even periotomes. Any rotary movement to pull the teeth is eliminated.

A secondary advantage for both the surgeon and the patient is a time difference of 5-7 months by avoiding bone restoration and being able to perform immediate implantation. Furthermore, improved soft tissue management can be expected. Limitations of the system are molars without a prior section, severely curved roots and teeth with extensive ankylosis.

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