Maintain a natural tooth or place an implant? "Decision should be patient centered"



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In the recent years dental implant placement has increased manifold in the dental practice and it is very heartening to learn that the awareness regarding dental implants amongst the general population is also on the rise. In comparison to the conventional methods of tooth replacement, the dental implant supported restorations have several advantages, including no risk of dental caries in the restored region, elimination of the need for removing precious tooth structure (as in cases of fixed partial dentures), high predictability and survival rates, if properly placed and maintained.

The periodontally compromised teeth may exhibit different challenging signs, including mobility. A periodontist is trained in the preservation of tooth supporting structures to maximize the life span of a tooth in the oral cavity. However, with the advent of dental implants an increasingly high numbers of implants are being placed, even in those cases where the teeth can be predictably saved by periodontal regenerative procedures. Due to different reasons, it appears as if the science of regenerative periodontics is being overshadowed by the dental implants, even in situations like moderate periodontal disease which can be effectively and predictably managed by periodontal regeneration. This appears to be an alarming scenario as far as ethical practices are concerned. A study conducted on the patients with aggressive periodontal disease reported that the periodontally compromised teeth with questionable or even hopeless prognosis could be retained in the oral cavity for as long as 15 years.[1] In a randomized controlled trial involving a 10 years follow up, the success outcome of periodontal regeneration of teeth with attachment loss to or beyond the apex of the root was compared with tooth extractions and replacement with implants. It was observed that 88% survival rate was reported in the teeth managed with periodontal regeneration in comparison to 100% survival rate of teeth replaced with dental implants. Also, the treatment costs of the periodontal regenerative therapy came out to be significantly lower than dental implants.^[2]

No doubt dental implant results in a tangible benefit to the patient in terms of final results in less time period and a reasonably good survival rate, but a dental implant is considered "survived" if it is still in the oral cavity, which implies that it also includes the dental implants with associated problems such as periimplant mucositis, periimplantitis, severe bone loss and sleeping implants.[3] A plethora of studies have shown that teeth with reduced periodontal support can remain functional for a number of years, if they are properly treated & well maintained. Extraction of such teeth can be avoided or postponed for several years. Research has shown that 80% of implants presented with periimplant mucositis, and 12% - 66% had periimplantitis after 5-10 years. Apparently, it appears that the patients looking forward to dental implants are not educated about the associated complications.[4]

Many clinicians consider dental implant as "the better tooth" or "the more reliable abutment". So, quite often they advise extraction of even salvageable teeth. Broadly, we can classify a tooth as: (a) good or questionable, but treatable or, (b) hopeless, with imminent extraction.

For questionable teeth, different options to retain it in the oral cavity should be considered, before taking a decision to extract it and replace with an implant. Whenever confronted with the decision to either extract or treat the questionable teeth,

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the clinical expertise of the clinician & patient's desires matter a lot.^[4] As far as patients are concerned a study revealed that around 65% of patients prefer to keep their questionable natural teeth.^[5]

An implant can serve as a replacement for an extracted tooth at any point, but extraction of a tooth is an irreversible decision, which cannot be undone. Implants are supposed to "replace the missing teeth" but they are not supposed to "replace teeth". So the dental implants should replace the natural teeth only if the means to restore them back to function are negligible. [6] Whenever in doubt, the decision should be based on scientific evidence, taking into consideration the clinical & radiographic findings as well as patient & tooth related risk factors. [7]

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REFERENCES

- Graetz C, Dörfer CE, Kahl M, Kocher T, Fawzy El-Sayed K, Wiebe JF, et al. Retention of questionable and hopeless teeth in compliant patients treated for aggressive periodontitis. J Clin Periodontol 2011;38:707-14.
- Cortellini P, Stalpers G, Mollo A, Tonetti MS. Periodontal regeneration versus extraction and dental implant or prosthetic replacement of teeth severely compromised by attachment loss to the apex: A randomized controlled clinical trial reporting 10year outcomes, survival analysis and mean cumulative cost of recurrence. J Clin Periodontol 2020;4:768-76.
- 3. Clark D, Levin L. In the dental implant era, why do we still bother saving teeth?. Dent Traumatol 2019;35:368-75.
- Zitzmann NU, Berglundh T. Definition and prevalence of periimplant diseases. J Clin Periodontol. 2008;35:286–91.
- Ghahramani S, Ziar N, Moradi N, Bagheri Lankarani K, Sayari M. Preserving natural teeth versus extracting them: a willingness to pay analysis. BMC Oral Health 2022;22:375.
- Levin L, Halperin-Sternfeld M. Tooth preservation or implant placement: a systematic review of long-term tooth and implant survival rates. J Am Dent Assoc 2013;144:1119-133.
- 7. Sarafidou K, Lazaridi I, Gotsis S, Kirmanidou Y, Vasilaki D, Hirayama H, *et al.* Tooth preservation vs. extraction and implant placement in periodontally compromised patients: A systematic review and analysis of studies. J Prosthodont 2022;31:e87-99.