Crown lengthening for prosthetic and cosmetic purposes is a routine procedure performed regularly by restorative dentists and periodontists. The technical details of performing this procedure are well known since the object is to expose adequate tooth structure for access to prosthetic margins by either soft tissue or hard tissue removal or both. Often the surgical procedure is not the most challenging part of the process. Instead, it’s the decision of where and when to perform the crown lengthening that is often the most important problem that needs to be addressed. Decisions about prognosis, esthetics, surgical outcome, restorability, cost and effects on adjacent teeth must be considered.

Prognosis is the most important consideration. All the factors that affect prognosis should be evaluated and if the prognosis is questionable then committing the patient to a surgical procedure prior to crown fabrication is not indicated. Examples of this include teeth where the restorative margin will extend into the furcation, teeth with severe bone loss, teeth with questionable endodontic prognosis, etc. Teeth with either a poor periodontal, endodontic or prosthetic prognosis should be considered for extraction rather than subject the patient to any additional procedures.

There are situations where the surgical procedure has a questionable prognosis. These fall into several categories. If the anticipated crown margin is into a furcation entrance then the ability to adequately apically position hard and soft tissue is very difficult. A careful evaluation needs to be done prior to surgery. There are, however, differences in prognosis depending on which tooth is involved. For instance, a maxillary molar interproximal furcation presents a greater challenge than a buccal or lingual furcation of a mandibular molar. Another scenario involves a mandibular second molar where the presence of the buccal mucosa and external oblique ridge compromise the surgical treatment.
If crown lengthening is planned for a maxillary anterior tooth (for esthetic purposes this can include teeth as far distal as the first molar) then the consequences of a surgical procedure should be visualized on the adjacent teeth. Often in the maxillary anterior area the amount of tissue removed in order to properly execute the crown lengthening surgery leads to unesthetic exposure of crown margins and root surfaces of adjacent teeth. In some instances this problem can be avoided when the area to be treated is on the facial or palatal. The surgical procedure can be "isolated" to minimize damage to adjacent teeth with acceptable esthetic results for those teeth.

Restorability is often overlooked since a final assessment cannot be made in certain situations until the surgical procedure is done. If the position of the anticipated margin (either for crown or restoration) cannot be visualized ahead of time then the crown lengthening surgery should be started with the patient aware of the problem. The surgical procedure itself is used as a means of diagnosis and further treatment options can be discussed as the procedure reveals whether or not the tooth can be restored.

When cosmetics is the primary objective a problem can occur if the required amount of soft tissue to be removed for an adequate esthetic result impinges on the mucogingival junction. In order to properly treat these areas the surgical procedure must include soft tissue removal, but also incorporate mucogingival surgery to adequately address the lack of attached gingiva that would result if only excisional surgery is done.

Though cost is not often a consideration it can be a factor when the tooth in question needs endodontic treatment, crown lengthening and a crown. Putting all these costs together is comparable to extraction and either implant placement or bridge fabrication. This situation again goes back to prognosis and how long the predicted life expectancy is versus a bridge or implant.

If you have a crown lengthening situation that requires an assessment of prognosis and treatment plan have your patient contact my office for a complimentary examination.

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