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INTRODUCTION

Preserving the pulp vitality is the main aim of present day dentistry. However due to a myriad of conditions, the use of posts may have to be considered as the last therapeutic option. Generally, endodontically treated teeth have already undergone significant coronal destruction and a pertinent loss of radicular dentine. In such a condition the non metallic posts help to bring the concept of an endoesthetic restorative continuum closer to reality by providing an esthetic post, a composite core and an automixed resin luting cement, thus formulating a monobloc that ensures not only high quality esthetics but is also safe, durable and easy to use for the clinician.

CLINICAL APPLICATION OF GLASS FIBER POSTS

The step by step protocol is easy to follow as given below;

1. Evaluate a successfully treated root canal tooth by confirming radiographically the intact apical seal
2. Remove the gutta percha such that 3-4 mm of intact apical seal is retained
3. Insert the glass fiber post after adequate canal preparation
4. Lute the post in place using flowable composite
5. Build up a composite core
6. Take a final impression for crown placement

It is important to note that a post that can be bonded to tooth structure improves its ability to retain the entire foundation. Hence it is imperative to select a post that provides maximum retention while at the same time removing as little tooth structure as possible

DISCUSSION

The glass fiber post is a clear resin post that is designed to refract and transmit natural tooth colors. It is placed passively in prepared canal and is available in different sizes and diameters. Advantages offered by the resin post over metallic posts includes increased bond strength, lesser chairside work for clinician and forming an esthetic tooth composite monobloc. Other secondary advantages are its ability to distribute stress, capability to maintain intraradicular rehabilitation and ease of retrievability.

The root length, shape and amount of tooth structure lost as well as the periodontal status and final root canal treatment quality are important aspects in deciding the success or failure of post endodontic restoration. Post placement should be as long as possible for better stress distribution and increased retention. Placing a long post in a short root may cause disruption of root canal seal at the apex and eventually may lead to root fracture also.

Resin fibre glass posts are also easy to retrieve as compared to metal posts, that may compromise the remaining dentine while being removed from the radicular tooth structure. In case of glass fiber posts,

the use of gates glidden drill through the existing post can safely act as a vertical guide making the post removal rapid and predictable

Trial post placement, before seating post in place, is a must, to see the proper placement, position and length of post in dentin. After post placement and before curing initiation, the excess flashes of composite should be removed by microbrush to aid in better post placement. Curing of composite at minimum of 40 sec is advocated, but this variable depends on the type of composite cement used and the manufacturers instructions. Shade matching should be accomplished and keeping the variables of hue, chroma and value in mind, so that the core composite material is of the same shade, as the final crown for an esthetic result

CONCLUSION

Modern day endodontics demands clinically convenient and esthetic post and core systems to help restore lost tooth structure. Recent developments in use of esthetically viable non metallic posts have served to provide an ideal endoesthetic-restorative continuum comprising of an esthetic non metallic post, a composite core and an automixed resin luting cement

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