

Ask The Dentist March 2012

Dear Dr. Winter, can an apicoectomy treated tooth be used as an abutment for a root supported overdenture?

Dear Diana, that's a great question. For readers that may not understand what you have asked I will clarify your question. First if a tooth requires a root canal, it is opened, cleaned and filled with a material called gutta percha. That will allow the tooth to remain in your mouth. If the root canal procedure fails and an abscess develops or won't fully heal an apicoectomy is done to remove the very tip of the root. This root end is removed surgically and filled with a retrograde material.

Sometimes this root canal treated root can be saved and an attachment can be cemented into the root to act as a retention device for the denture. In other words, the root has a male attachment and the denture houses an "o" ring type retention device that can snap on to the root. The denture is then referred to as a root retained overdenture. Generally speaking you would need several roots to make this work as a single root would be subjected to a lot of force factors that could lead the remaining root to fracture and it would require an extraction.

It is a wonderful idea to retain roots as the root will retain the bone! That means that if the root overdenture fails, there may be enough bone to place a dental implant. The implant can also be fitted with a snap so that the denture snaps on to it and then it is called an implant overdenture as opposed to a root -based overdenture.

To answer your question specifically not can an apicoectomy treated tooth be used for an overdenture retentive element; it depends on the length of root that is left and the quality of the apicoectomy.

There needs to be at least 3 mm of gutta percha filling material next to the apicoectomy retro fill material (when they cut off the end of a failed root canal they place a filling in the remaining end of the root to create a better seal), and an additional 10 mm of clean usable root structure above that. So you would need at least a 13mm long root. The use of an attachment in an already compromised root means that this is NOT predictable and may fail. That being said, it can certainly be tried if you are aware that the costs, risks and failure potential of this procedure are present and informed consent has been fully explained and accepted by you. In other words if it fails, you would not get a refund or a guarantee. In my office I would offer some courtesy credit toward an implant restoration but your dentist may not elect to do this. If you want to avoid the potential failure, the root may need to be extracted and an implant(s) considered to retain your denture. Typically you would require 6 implants to remove the palate on your denture and create a snap-on-implant prosthesis.

We would be happy to offer an implant or root retained overdenture consultation

or comprehensive examination to see whether you are a candidate for these procedures. Please call our office at 414-464-9021 to schedule and let them know you read about us in Hometown Publications for a special consideration. Please visit us at [WWW.WINTERDENTAL.COM](http://WWW.WINTERDENTAL.COM) for photos and videos of our dentistry or to investigate the interest free financing we offer.

Sincerely,

Richard B. Winter D.D.S. M.A.G.D.D.I.C.O.I.

Master Academy of General Dentistry

Diplomate International Congress of Oral Implantologists

Bruce K. Winter D.D.S.

Board M.A.T.C.