

Problem Solvers 30 Precision Attachments

Synonyms: Stress breakers, ERA's, ball attachments, overdentures, precision partials, CEKA attachments, Bredent Attachments, Sterngold attachments.

Patients that have to wear partial dentures usually stop wearing them, as they are uncomfortable and unsightly. When teeth are missing, if an attachment is built into a root of a tooth or a crown, the metal clasp may be hidden to improve the looks of the partial as well as hold it in your mouth better. This article will discuss what precision attachments are and what they can be used for.

Partial dentures are usually made out of a cobalt, chrome alloy and they are cast to fit the existing teeth precisely. The comfort of a partial is dependant upon the number of the teeth that are clasped and the stability and location of these teeth. If you have four teeth to hold on to a partial it's like having four legs on a chair-it can support a lot of weight. If you only have two teeth the partial can rock like a teeter-totter. The line that connects the two teeth acts like a fulcrum and the partial can move around this pivot point.

A precision attachment is a device that allows the partial to snap or slide into it. For example if two crowns are splinted together and have a slot built into the back crown, then the partial can have a metal piece that wedges into the slot to help hold the partial in place. This type of attachment is called an intra-coronal attachment as it is built into a crown or bridge.

This type of attachment is rigid and over time it may wear out. Yet to have a partial fit into a crown can eliminate the need to put a metal clasp on this tooth.

Resilient attachments are made of a flexible rubber or plastic material and they are usually made sticking out of a root or off the back of a bridge. To picture this imagine the root of the tooth cut off at the gumline. The nerve has been removed and the root canal space is filled (root canal). Then a post with a type of ball or Locator attachment or ERA attachment (different types of resilient attachments) can be cemented into the root. This would be called the female attachment. Next the partial would have the male counterpart picked up with acrylic inside the partial so that the partial will snap on to the attachment. These attachments can provide extra hold to keep a loose partial in place. Attachments can be strategically placed in the mouth even without teeth being present to hold on to them! Dental implants can be fitted with these attachments so that you can basically put snaps in your mouth so the partial can snap on to various spots that are well spaced to provide great chewing and a nice solid prosthesis.

I have mini-implants and the denture snaps on to them. Is this a precision attachment?

Yes, any device that allows a denture or partial to snap on is a type of precision attachment. With mini-implants this is usually a ball attachment on the head of the mini-implant and the denture or partial has a housing that has a rubber “o” ring that will snap on to the mini-implant.

I have a large bridge that came out and I don't want implant surgery. Can I have a precision attachment?

If the remaining teeth are solid and have healthy gums, a precision attachment may be a possibility. If half the teeth in an arch are missing and the desire is to make a precision partial, it is very difficult to structurally make this work. You would need to remake at least two crowns, splint them together and create an attachment off the back end of the crown. That means that chewing on the partial (an entire side of teeth) will put stress on the front teeth and could lead to fractures of the splinted front teeth.

I only have one tooth left on the left and have a tooth left on the right. Am I a candidate for these attachments?

Precision attachments built on two teeth would have a poor long -term outlook as the partial can rock around the imaginary line that would connect these two teeth. So while it could be done, it would be highly advantageous to add implants to the equation to add more support and prevent all the stress from chewing from weakening the remaining teeth.

I just had my partial denture made and I hate the hooks! My dentist didn't tell me about attachments. What should I do?

Well, you first need to realize that not all dentists are well educated about the types of attachments available and the procedures necessary to use them. If the dentist felt you were not a candidate, you must ask them to explain the pros/cons/costs/advantages/disadvantages/benefits and risks of this procedure and whether you may be able to upgrade to this type of dentistry. Since precision attachments can add substantial costs to your treatment it may not have been within your agreed upon treatment costs. Insurance companies will not pay for precision attachments so the extra costs would have to be absorbed fully by you as well.

How much do attachments cost?

That will vary from practice to practice and is dependant upon the type of laboratory they use, their overhead and the number of crowns or roots needed to hold on to these attachments. Usually it will involve two crowns per attachment, the attachment fee and the added cost to place it in the partial. If a crown is \$1500 then

two splinted crowns could be \$3,000 with an additional \$1,000 for the attachment and lab fees.

These fees are for illustration only but they do show that whatever the dentists fees are for this procedure, it may be a similar price to place a dental implant with an attachment or a crown rather than splint two crowns together with an attachment.

When should I consider using a precision attachment versus an implant?

If you are a severe diabetic, have a bleeding disorder, refuse surgery, have been on a Bisphosphonate or require extensive grafting or sinus lifts to place implants, it might be less invasive and less costly to make a precision attachment rather than a dental implant.

I have a partial with a precision attachment and every time I bite down my partial pops off.

This may be due to the bite not being adjusted properly or the attachment may not be seated correctly. It is important to have the attachment seat passively so it doesn't create forces that could cause the attachment or teeth to break. Have your dentist check this right away to prevent loss of the abutment teeth (teeth holding on to the attachment).

I have three teeth on each side of my mouth and don't want any metal showing when I smile. Can I have precision attachments?

If the remaining teeth are healthy you could have crowns placed on one or two teeth on each side (two is better) and then the metal would not show in your smile. Note that if your dentist has back teeth that can have traditional clasps, it will save you money. If this is objectionable, then attachments can be made on the front and backside of both sections of teeth to hide all the partial denture clips.

In closing, partial dentures or complete dentures can always use better hold! That is why millions of dollars are spent on denture adhesives each year. Whenever additional elements can be added to hold in partials and dentures, it will give patients better chewing, more cosmetic smiles and preserve the underlying bone by decreasing denture movement. This can be accomplished by using precision attachments. These can be rigid or resilient and can be mounted on crowns or inside roots that have had root canals or on top of dental implants.

You should always ask your dentist about ways to make your prosthesis more comfortable. I have a series of articles about Upgradeable Dentistry on my website below that will further talk about how denture patients should always be given options that will allow them to Upgrade their treatment to get rid of their "false" teeth. Precision attachments are an upgrade and can really help improve a persons'

self-esteem and get them motivated to pursue more comprehensive dental treatment in the future.

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