

**Delta Dental of Virginia Clinical Policy # 201**

<b>Subject</b> Post and Core Placement	<b>Originating Department</b> Clinical Professional Services
	<b>Signature Authority</b> Dental Director

**Type:**     
  New                     
  Replacement                     
  Revision                     
  Clarification

**Date:**            11/15/2009                     
 **Revision Date:**

<b>Preamble:</b>	<p>The Clinical Policy Bulletin is an expression of Delta Dental of Virginia's (DDVA) determination regarding whether certain services or supplies are medically or dentally necessary. DDVA bases its conclusions on a review of currently available clinical literature. This includes, but is not limited to, clinical outcome studies published in the peer-reviewed medical and dental literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health professional organizations, views of physicians and dentists practicing in pertinent clinical areas, and other applicable information. DDVA reserves the right to revise these policies as new clinical information is available and we welcome submission of further relevant information.</p> <p>A group may define covered dental services under their dental plan, as well as those services that may be subject to dollar caps or other limits. The plan documents outline covered benefits, exclusions and limitations. DDVA advises dentists and subscribers to consult the plan documents to determine if there are exclusions or other benefit limitations applicable to the service request. The conclusion that a particular service is medically or dentally necessary does not constitute an indication or warranty that the service requested is a covered benefit payable by DDVA. Some plans exclude coverage for services that DDVA considers either medically or dentally necessary. When there is a discrepancy between DDVA's clinical policy and the group's plan documents, DDVA is to defer to the group's plan documents as to whether the dental service is a covered benefit. In addition, if state or federal regulations mandate coverage then DDVA will adhere to the applicable regulatory requirement.</p>
<b>History:</b>	<p>Placement of a post and core is indicated when the remaining coronal structure of an endodontically treated tooth is insufficient to provide adequate retention for a full crown restoration. The purpose of the post component, which may be made from various materials and either custom fabricated or prefabricated, is primarily to retain the core over which the full crown is to be placed. The post and core may also be fabricated as a single unit utilizing one material type. Research has shown that the post is not a strength enhancing device and may be a factor in weakening the root and causing subsequent root fracture (1,2,3,4,5). Consequently, posts should only be used when there is a requirement for increased retention of the final restoration. Studies have also shown that a post is not necessary in an endodontically treated anterior tooth with minimal loss of tooth structure (2,3,5,7). An anterior tooth with a conservative endodontic approach can often be successfully restored with a bonded restoration in the access cavity (3,6,7). If full crown coverage for an anterior tooth is deemed necessary due to loss of structure from fracture, extensive caries, or large restorations, the tooth may require a post</p>

	to enhance resistance to functional forces (1,3,5,6).
<b>Policy:</b>	<p>DDVA Guidelines:</p> <ol style="list-style-type: none"> <li>1. For placement of a post and core, a tooth must have insufficient tooth structure to support a cast restoration. A tooth must have radiographic evidence of fifty percent or more of tooth structure missing or evidence of cuspal fracture.</li> <li>2. For placement of a post and core, in addition to a full crown, a tooth must exhibit successfully completed endodontic treatment.</li> <li>3. Documentation of completed endodontic therapy must include a diagnostic radiograph.</li> </ol>
<b>Code(s):</b>	<p>D2952—Post and core in addition to crown, indirectly fabricated  D2954—Prefabricated post and core in addition to crown  D6970—Post and core in addition to fixed partial denture retainer, indirectly fabricated  D6972—Prefabricated post and core in addition to fixed partial denture retainer, indirectly fabricated</p>
<b>References:</b>	<ol style="list-style-type: none"> <li>1. Cheung W. A Review of the Management of Endodontically Treated Teeth: Post, Core, and the Final Restoration. J Amer Dent Assoc 2005;136:611-619.</li> <li>2. Guzy GE and Nicholls JI. In-Vitro Comparison of Intact Endodontically Treated Teeth with and without Endo-Post Reinforcement. J Prosth Dent 1979;42:39-44.</li> <li>3. Trope M, Maltz DO and Tronstad L. Resistance to Fracture of Endodontically Treated Teeth. Endo Dent Traumatol 1985;1:108-111.</li> <li>4. Morgano SM. Restoration of Pulpless Teeth: Application of Traditional Principles in Present and Future Contexts. J Prosth Dent;75:375-380.</li> <li>5. Heydecke G, Butz F and Strub JR. Fracture Strength and Survival Rate of Endodontically Treated Maxillary Incisors with Approximal Cavities after Restoration with Different Post and Core Systems: An In-Vitro Study. J Dent 2001; 29:427-433.</li> <li>6. Sorensen JA and Martinoff JT. Intracoronal Reinforcement and Coronal Coverage: A Study of Endodontically Treated Teeth. J Prosth Dent 1984;51:780-784.</li> <li>7. Pontius O and Hutter JW. Survival Rate on Fracture Strength of Incisors Restored with Different Post and Core Systems and Endodontically Treated Incisors without Coronoradicular Reinforcement. J Endod;28:710-715.</li> <li>8. American Dental Association. Current Dental Terminology. CDT 2007-2008;16,50(2006).</li> </ol>