

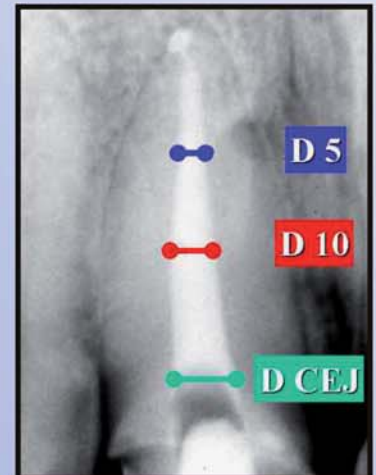
D. T. LIGHT-POST DEVELOPMENT

In the late 1990's, an Prosthodontics Professor, Dr. Pierre Bourrias, and an Endodontic professor, Dr. Salam Sakkal at the University of Montreal decided that it was time for an endodontic post that fits to the realistic contours of the treated canal, rather than the traditional approach: adapting the canal to accommodate the post. Collaboration between these academicians and RTD culminated in the development and introduction of the "D. T." Or *Double-Taper* LIGHT-POST, in 2001.

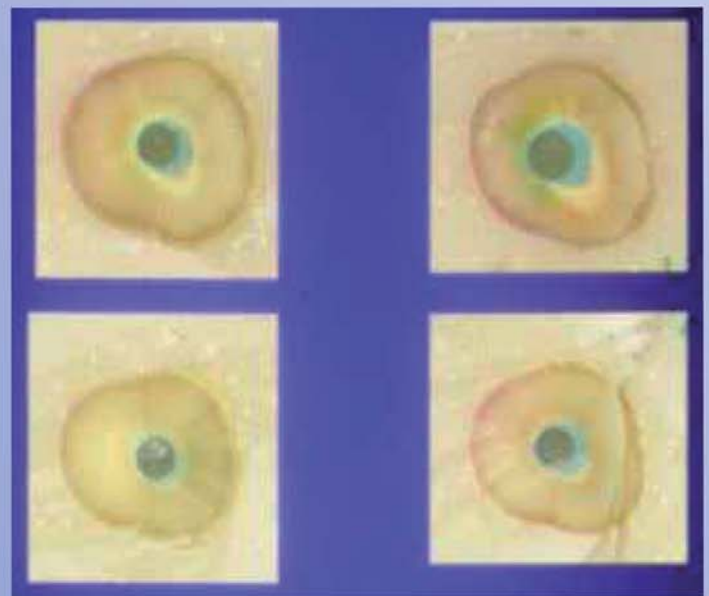
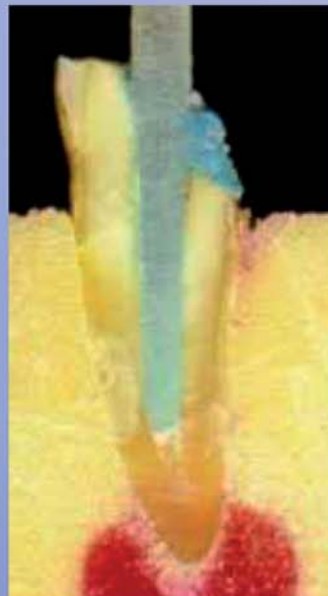


In order to determine what this anatomically-correct shape should be, root canal treatments were done on 967 extracted teeth, including all tooth categories and several popular endodontic techniques.

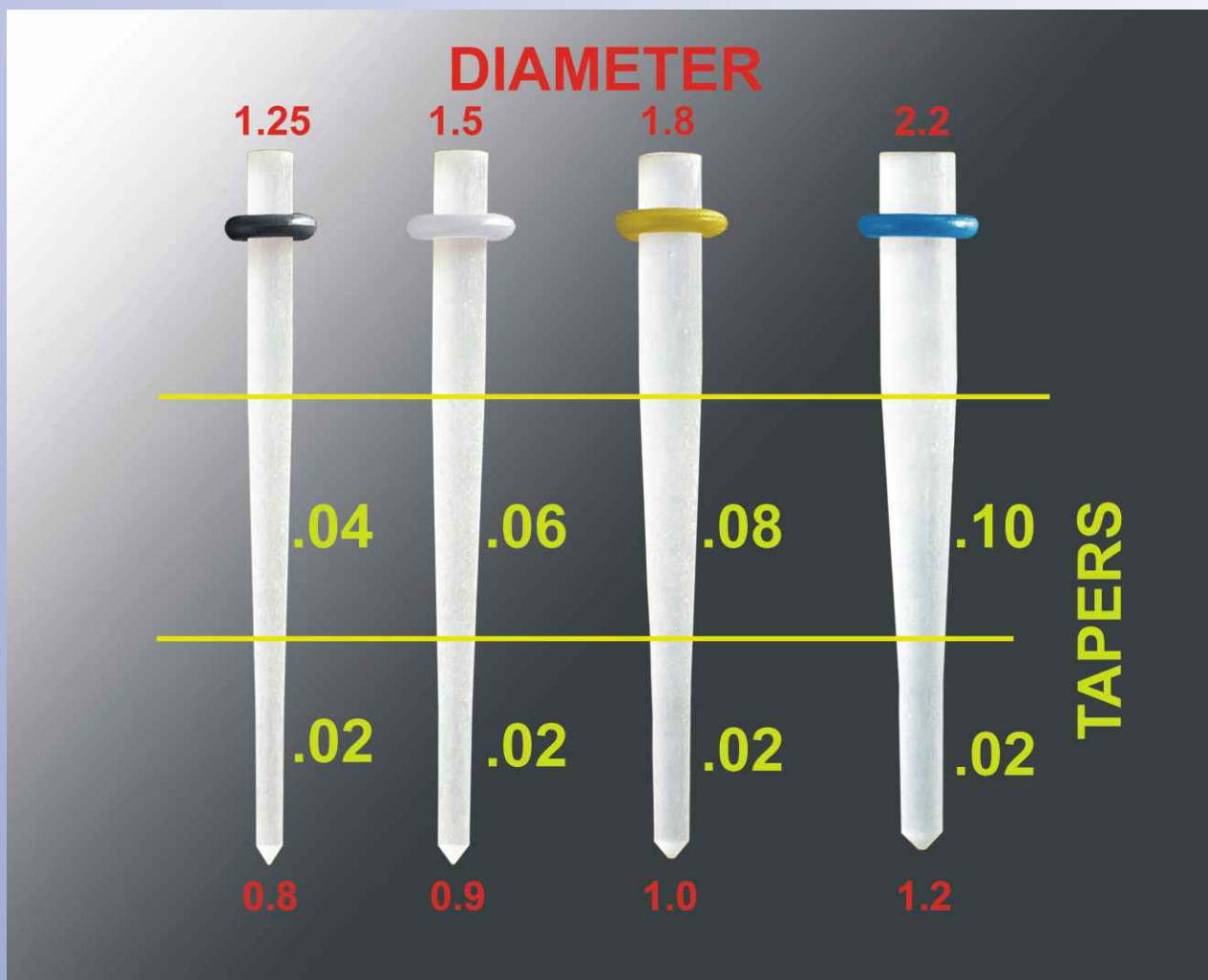
THOUSANDS of measurements were taken at 5mm, 10mm from the apex and at the CEJ, using the Schick digital radiography system. Means ranges and standard deviations were calculated to define and standardize the diameter and taper for each root of each treated tooth. This extensive radiological evaluation universally showed a DOUBLE taper profile; a narrower taper in the apical third, and increased taper moving coronally.



Pursuant to these measurements, RTD created and furnished many different double - tapered prototypes for further evaluation. These prototypes were placed into nearly 400 extracted teeth, using dyed (blue) cement. The restored teeth were then sectioned saggittally and longitudinally, and analyzed for optimal adaptation.



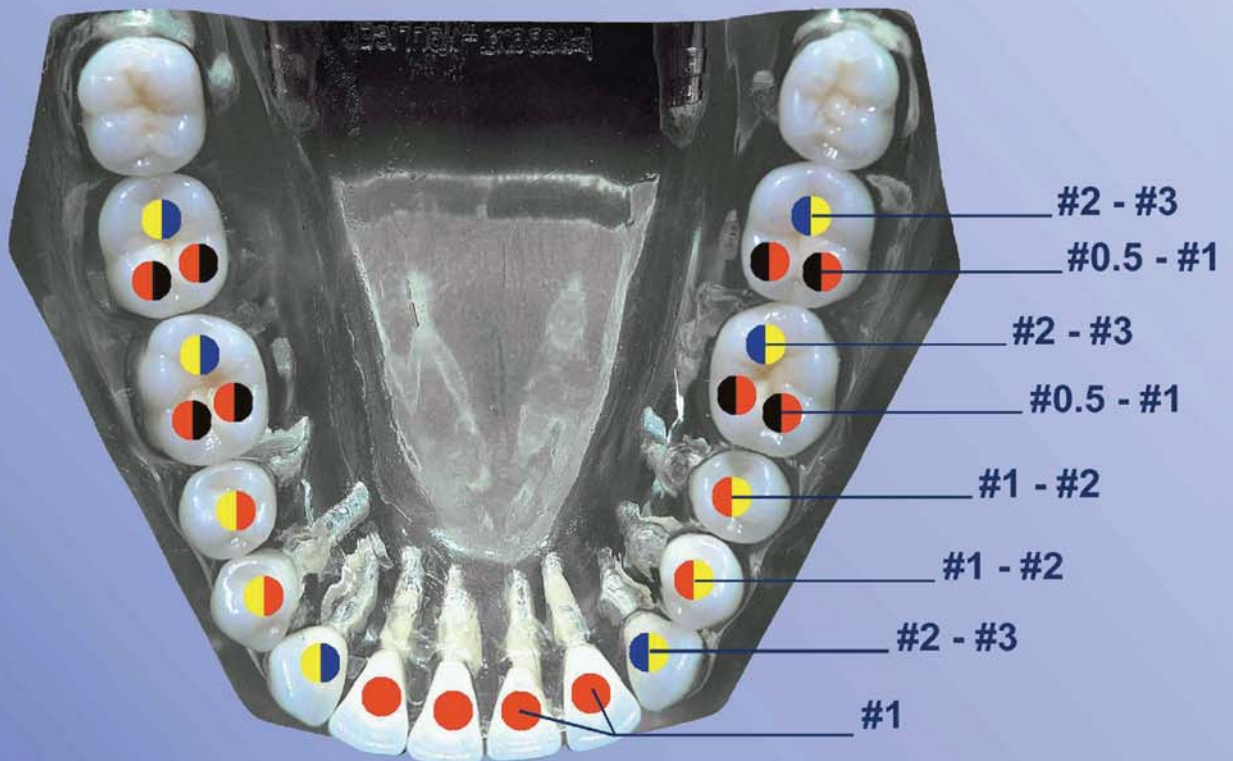
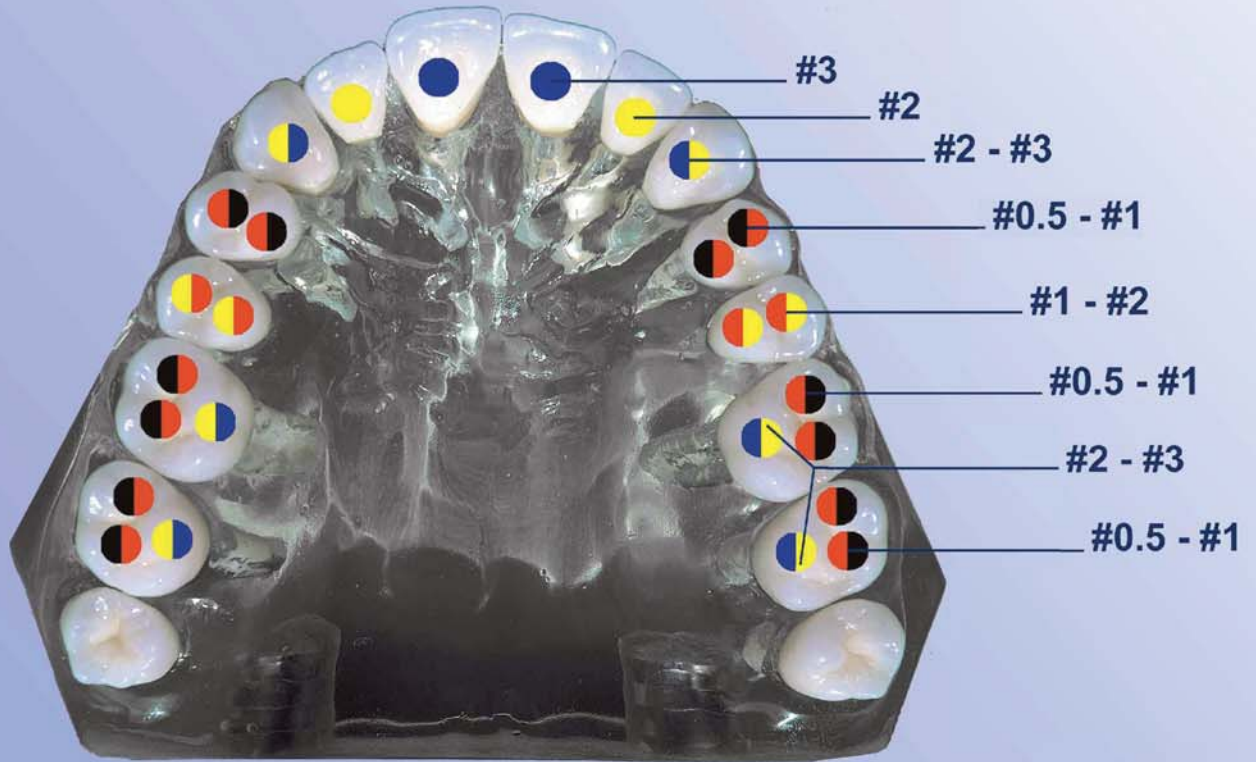
A range of only 4 post sizes is necessary to address the needs of endodontically treated adult dentition. All 4 D. T. LIGHT-POST sizes have the predetermined .02 degree taper in the apical 5mm. The middle section of the post increases in taper from the smallest "point five" post to the largest #3 post.



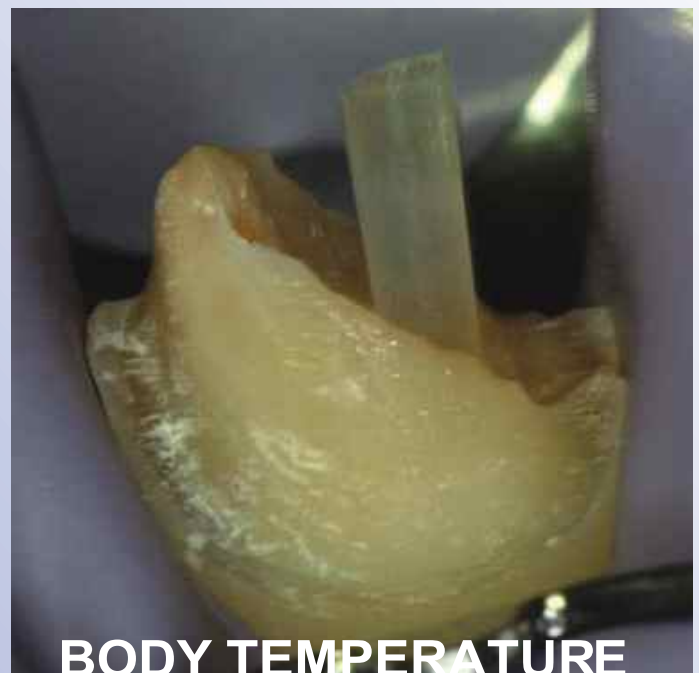
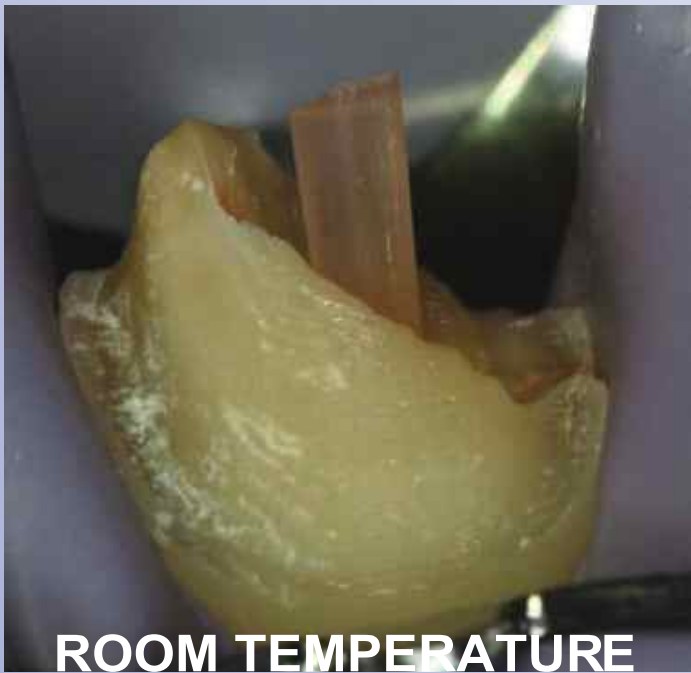
In early 2007, the product and technology were upgraded to include intrinsic, on-command color change; the D. T. LIGHT-POST ILLUSION. The posts are furnished in colors that match the drills and identify their size before and after placement.



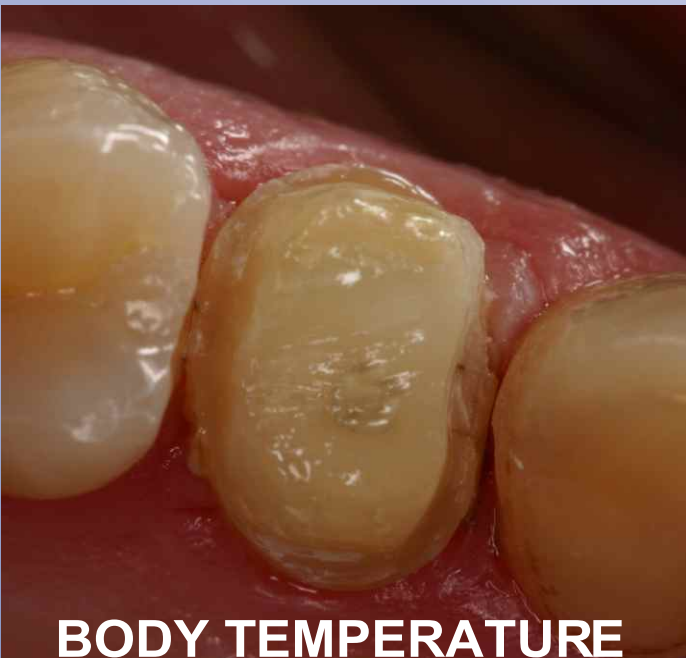
Because of the way these posts' dimensions were developed, it is easy to establish guidelines for post selection. Post sizes "point-five" and #1 are best suited to smaller canals, premolars, molars and lower incisors. Post #2 properly fits most maxillary laterals, upper and lower canines. Post #3 is best used in the palatal root of maxillary molars, distal canals in mandibular molars and in upper centrals and canines. Of course, clinical experience and judgement are of equal importance to these guidelines.



After the post is placed (left), the color disappears, and the post becomes completely translucent (right).



IF re-access should ever become necessary, cold air or water will prompt the return of the color, to facilitate an easier removal process.



The D. T. LIGHT-POST System accommodates the Endodontists' preference for minimal preparation, and affords the Prosthodontist maximum mass and surface area for core and crown preparation.

