Letter to the Editor

Dear Editor

Approximately 3 years ago a study on the performance of the Anatomic Endodontic Technology (AET) system (Ultradent Products Inc., South Jordan, UT, USA) was initiated by three researchers, Drs F. Barbakow and O. Peters of the University of Zurich along with Dr Carlo Becce of Italy. The project commenced in July 2002 and the practical aspects completed about 3 months later. The report of the study, however, did not surface until recently (Paqué *et al.* 2005). Given the lapse of time from the initial laboratory work to publication the data presented in the paper represents the performance of a system of files and instructions that have been obsolete for years. In short, the system studied was the precursor to the current AET system. While this study may have some historical interest, it has the potential to be misleading about the current state of the technology.

Drs Barbakow and Peters had information about the concerns of Ultradent Products Inc. long before publication and the JOE abstract one and a half years ago (Paqué *et al.* 2004). Dr Becce had his name withdrawn describing the study as 'unbelievable,' because of the lapse of time as well as inherent problems with the study. Prior to the abstract publication, extensive correspondence occurred between Drs Barbakow, Peters and myself. A few highlights are:

1. From the date of the study completion Drs Barbakow and Peters sat on the data for 2 years.

2. Prior to the *JOE* abstract publication, I communicated to Dr Peters and Barbakow the fact that the abstract reported on obsolete technology. 'The AET system that you describe in your abstract is no longer in existence! It is not what Ultradent sells today.' 'Changes have been made both in file design and technique and instructions'. And, 'This (the lapse between completing a study and when they are published) can be an expected problem with our rapid evolving technologies. However, it is unacceptable to have data lay dormant for 2 years after the study has been finished!'

The publication of this study does not serve the dental profession, Dr Riitano or Ultradent. I stated to Dr Barbakow in my November 2003 correspondence that: 'Tragically, in the case of this study, should this abstract be published (and worse, a full manuscript now), a system originally designed by a brilliant inventor, Dr Riitano an endodontist from Italy, would be wrongfully tainted.' Contemporary AET taught by Dr Riitano recommends the use of NiTi in curved roots for the apical third, while the AET system is used in the middle third. This appears to offer the best of both worlds for curved canals.

In spite of our efforts, Drs Barbakow and Peters decided to have the *JOE* abstract published and one and a half years later, the *IEJ* article. They never mentioned in even the discussion section that this work was performed with an obsolete precursor design to the present AET system. This level of carelessness raises legitimate questions about the motivations and intentions of the authors.

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Response from authors

Dear Editor

Thank you for the opportunity to comment on the letter from Dr Dan Fischer regarding the peer-reviewed paper by Paqué *et al.* (2005).

Firstly, the time-line was in fact as follows: the study was initiated in July 2002 and the technical part including canal preparation and scans was finished in October 2002. Therefore, it was less than a year to the submission of the abstract to the American Association of Endodontists. Considering the time involved for careful evaluation of μCT data, no significant lapse of time occurred, certainly not in the range of 2 years as described by Dr Fischer.

Secondly, all canal preparations in this study were completed by Dr Becce, a consultant to Ultradent. Thus, the preparations were accomplished by a clinician with an excellent understanding of the technique. The other authors, who later reported the results of the experiment, had no prior experience with the canal preparation technique (Endo-Eze AET)

and were content to allow Dr Becce to prepare the canals. It goes without saying that the authors assumed that Dr Becce used the most up-to-date preparation technique for the system.

Thirdly, contrary to claims made by Dr Fischer, no attempt was made by Ultradent to inform the other authors of significant changes in the way the technique was taught. While a technique manual (Ultradent 2001) similar to the one that was used in the study in question was published on the Ultradent webpage as late as summer 2004, it was only very recently that an updated technique description written by the original inventor, Dr Riitano 2005, appeared in the literature.

Dr Fischer claims that this updated technique 'appears to offer the best of both worlds for curved canals'; however, no evidence for this claim in the form of a scientific evaluation has been provided to date. In fact, not a single paper on Endo-Eze AET has been published in peer-reviewed journals, besides our study that is now criticized by Dr Fischer (pubmed database accessed January 3rd, 2006 by O.P.).

Another fact worth noting: after the submission of an abstract (Paqué *et al.* 2004) for evaluation and potential presentation at the AAE meeting in Anaheim in 2004, steps were taken by Ultradent to have its acceptance blocked. Only timely intervention by the authors persuaded the AAE officials involved in the 'acceptance process' to ensure that the findings of the study were presented.

It is our opinion that this oral presentation and the subsequent publication of the paper in fact do serve the dental profession. To actively avoid reporting or publishing findings would do exactly what Dr. Fischer so unfairly accuses the authors of: 'not serving the profession'.

Over many years the authors have strived to serve the profession well and will continue to do so in the future. Certainly, the authors may very well have some human failings; fortunately, carelessness is not one of them. In addition, we are not influenced by the financial interests of companies in one or more products. Undoubtedly, Ultradent has an array of excellent products that do serve the profession well and are in fact used by some of the authors. Unfortunately, on occasions, some products do not fulfil expectations, no matter how much the CEO claims they do. The company should rather accept those shortcomings and have potential improvements independently verified.

Finally, we feel that our common cause, delivering optimized patient care, would be best served if time and effort were spent to evaluate the merits of a particular approach, based on scientific methods, and not by aggressively marketing products or attacking others.

Best regards

O. A. Peters
for F. Barbakow & F. Paqué

References

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