

Dr. Christine Marie Melito



Dr. Christine Marie Melito graduated magna cum laude from Northeastern University with a B.S. in Cardiopulmonary Science in 1997. After she practiced as a respiratory therapist for three years, she began her dental training. She received her DMD degree in 2004 from Tufts University School of Dental

Medicine, where she graduated summa cum laude.

Dr. Melito was elected into the Alumni membership in the XI-XI Chapter of Omicron Kappa Upsilon, a National Dental Honor Society.

She then received her Masters of Science degree in Dentistry and a Certificate of Advanced Graduate Study in Endodontics from Boston University Goldman School of Dental Medicine in 2007. She has been in private practice in endodontics since that time. Dr. Melito is a member of the American Association of Endodontists, the American Dental Association, and the Massachusetts Dental Society. She presented the results of her thesis research at the 2006 AAE Annual Session in Honolulu.

Dr. Melito is a Massachusetts native and lives with her husband Mark and son Dominic in Saugus. In her spare time, she enjoys running, cooking and traveling.

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Clinical Update:

Advances in Imaging have Increased the Detection of a Fifth Canal



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Clinical Update: Advances in Imaging have Increased the Detection of a Fifth Canal

Several studies have been conducted to demonstrate the extremely high incidence of the second mesiobuccal canal in maxillary 1st and 2nd molars. This missed canal during initial root canal therapy has been identified as one of the most significant causes of endodontic failure in the maxillary molars. These findings have allowed endodontists to educate the general dentist about this aberrant anatomy and thus result in an overall decrease in the need for retreatment among teeth treated under microscopic examination. Use of the dental microscope has now allowed endodontists to identify similar findings in mandibular molars.

According to an article in the March 2004 issue of the Journal of Endodontics, recent studies have shown the incidence of a fifth canal in the mesial root of mandibular first molars ranges from 1 to 15%. As successful endodontic treatment is directly related to the proper and complete instrumentation of the canals, failing to debride the difficult to detect fifth canal can contribute to either the need to retreat the root canal, and or failure of the root canal.

Studies of the form and structure of the mandibular first molar has indicated its anatomy can be unusual. There can be an independent middle mesial root with aberrant canals, which may have a separate foramen or may be joined apically. In addition, third canals have been reported in the distal root.

In one particular case, detection of these canals was made possible through the use of gutta-percha cone fit radiograph. In this instance, the patient was found to have mesiolingual, middle mesial and mesiobuccal canals. The patient experienced no

postoperative sequelae after the obturation, filling and sealing of the canals, and was referred for coronal restoration.

A recent case study reported by La et.al further reinforces the reality of such unusual anatomy through the use of Cone Beam CT. The use of this technology in conjunction with microscopic examination has allowed for proper diagnosis, identification and treatment of such cases.

At Endodontics of Malden, Dr. Fernandes and Dr. Melito routinely examine the pulp chamber under the microscope to detect such aberrant fifth canals. This allows for proper treatment of all canals, which ensures superior results and prompt placement of the coronal restoration by the general dentist.

Baugh D, Wallace J. Middle Mesial Canal of the Mandibular First Molar: A Case Report and Literature Review. J Endodon. 2004 March; 30(3):185-186)

La SH, Jun DH, Kim EC, and Min KS. Identification of Independent Middle Mesial Canal in Mandibular First Molar Using Cone-Beam Computed Tomography Imaging. J Endodon. 2010 Jan; 36:542-545.

Dr. Jacinta Fernandes



Dr. Fernandes' career in Dentistry began when she was 17 years old at the Goa Dental College in Goa, India. She was awarded the B.D.S. degree in 1986 from Government Dental College and Hospital in Bombay. She participated in the "All India Entrance Exams" in 1988, placing 22nd and received the M.D.S. degree

in 'Operative Dentistry and Endodontics' at Nair Hospital Dental College in Bombay, India in 1991. She joined her family in the U.S., where she continued her education and attained the D.D.S. degree from New York University College of Dentistry in 1994. Upon completion, she attended The University of Medicine and Dentistry at the New Jersey Dental School and completed the Postgraduate program in Endodontics in 1996.

Dr. Fernandes opened 'Endodontics of Malden' in January 2005 after acquiring an existing location from the highly regarded Endodontics, Inc. Thus, accomplishing one of her professional dreams – maintaining a successful state of the art endodontic practice where her patients would receive the utmost care and respect.

Dr. Fernandes continues her education and shares her knowledge on a regular basis with her colleagues. She is a member of the American Association of Endodontists, the American Dental Association, The Massachusetts Dental Association and the East Middlesex District Dental Society. Dr. Fernandes served as the secretary of the East Middlesex District for 6 years.

When not indulged in Dentistry, Dr. Fernandes devotes her time to her family, her husband Vinny and children – Aparna, Vikram and 11 year old Analiese. A luxury for the busy doctor these days is curling up 'uninterrupted' with a good book, gardening and travelling AKA 'just getting away'!