

# SMILES in the SPOTLIGHT

Pre-treatment



Pre-surgery



## CASE PRESENTATION

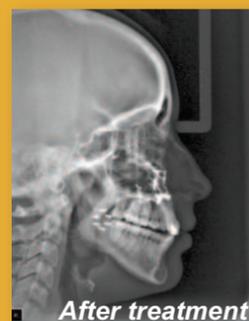
Teenage female patient referred by her dentist for orthodontic evaluation of chief complaints of 'underbite' and 'poor teeth alignment'. Oral examination revealed maxillary arch constriction, missing upper right lateral incisor, microdontic left lateral incisor, delayed exfoliation of mandibular molars, crowded & retroclined lower anterior teeth, and Angle Class III molars. Esthetically and functionally, this patient was dissatisfied with her occlusion.



Immediate post-op with surgical splint



After splint removal



## TREATMENT PLAN

Detailed orthodontic cephalometric analyses showed that the observed skeletal malocclusion was due to a combination of mild maxillary hypoplasia and moderate mandibular prognathism. Adequate, stable correction required combined orthodontic and surgical procedures. Surgical intervention was timed to coincide with cessation of facial growth. The peg-shaped lateral incisor required restorative enhancement, and ideally, the missing upper right lateral incisor required space creation and an implant replacement. However, the patient/parents opted to accept substitution of the missing incisor with the canine, the canine with a first bicuspid and accept a molar Class II finish on the right side.

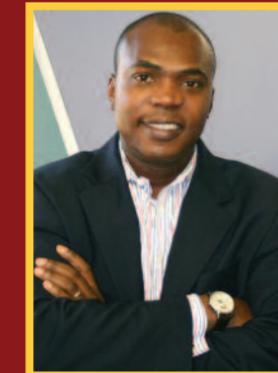
## PROCEDURES

The over-retained lower deciduous molars were extracted, fixed upper and lower orthodontic appliances were placed after a short course of rapid palatal expansion. Dental compensations were removed and progressively, space was created for the resolution of the crowded dentition. The teeth were aligned, maxillary and mandibular arches coordinated; orthodontic biomechanics also ensured creating space mesial and distal to the upper left lateral incisor for esthetic bonding. Progress/pre-surgical records and re-evaluation revealed that the best results would be attained by a 2-jaw procedure of Le Fort I maxillary advancement and bilateral sagittal split ramus osteotomy for mandibular set-back. A hand-wrist x-ray film was also taken to confirm that the patient's skeletal growth has neared completion. Surgical hooks were placed pre-operatively. An acrylic splint was inserted intra-operatively to aid maxillo-mandibular positioning based on pre-determined movements as planned on plaster models. Post-operative observation was done, and vertical inter-arch elastics utilized for further teeth positioning after removal of the acrylic splint. After debonding, the patient was seen by the restorative dentist to build up the left lateral incisor and re-shape and modify the right canine into a lateral incisor. Retainers were delivered.

## RESULTS

A very pleasing facial balance was achieved with excellent orthodontic and occlusal results; the patient and her family were highly satisfied with the attained results from a combined multi-disciplinary collaboration of a restorative dentist, an oral & maxillofacial surgeon, and orthodontist Dr. Deji Fashemo who coordinated the treatment.

## Deji V. Fashemo, DDS, MPH



Dr. Fashemo graduated from University of Ibadan School of Dentistry in Ibadan, Nigeria in 1992. After a year at the orthodontic residency in Lagos University Teaching Hospital, he moved to the United States. At the University of Rochester Eastman Dental Center, Rochester, N.Y. he underwent two years of Advanced Education in General Dentistry (AEGD), and eventually received the degree of

Master of Public Health (MPH) in clinical research.

In Rochester, Dr. Fashemo continued his clinical training with a residency in orthodontics; this was followed by a year of clinical fellowship in craniofacial & surgical orthodontics at the Indiana University School of Dentistry.

Dr. Fashemo came to Texas in 2004 to pioneer a hospital-based orthodontic program at Driscoll Children's Hospital in Corpus Christi and ran that program for five years. His professional career continues in the Dallas area where he established Fourth Dimension Orthodontics & Craniofacial Orthopedics – a unique private orthodontic practice to cater to general orthodontic patients while supporting the craniofacial anomalies program within Medical City Dallas Hospital where he also serves as the medical director of craniofacial orthodontics.

He is actively involved in clinical outcomes and health care access research initiatives, gives lectures at national and international meetings, and serves on several professional association committees and is a reviewer for the Cleft Palate-Craniofacial Journal.

Dr. Fashemo's professional memberships include:

- American Cleft Palate-Craniofacial Association
- American Association of Orthodontists & Southwest Society of Orthodontists
- American Dental Association, Texas Dental Association, and Dallas County Dental Society

While not fixing teeth, jaws and faces with braces, Dr. Fashemo enjoys playing soccer and spending time traveling with his wife and three daughters.

For more information concerning this case, contact:  
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