Arrested Development
An application guide that explores how conservative dentistry can benefit our patients and practices
by Sam Simos, DDS

Introduction
• An 18-year-old female presented for evaluation of decay and demineralised front teeth.
• These areas (Fig. 1 to 3) revealed soft decay that can be scooped with an excavator. Enamel is decalcified and weak, and there is flaking in the white and yellow spot areas.
• The patient’s health history is unremarkable. Dental history is unremarkable as well, with no soda habits and generally good oral hygiene.
• She has had orthodontic treatment, and noted that the decay began after the removal of her braces. No other decay is evident.
• Treatment options discussed included veneers or Tooth Mousse Plus regimen followed by conservative composite restorations with optimal treatment.

Office appointments were established once a week for four weeks. During these appointments, a phosphoric acid conditioning agent (Ultradent Ultra-Etch 35% phosphoric acid - Fig. 4 and 5) was applied using a syringe and tip within 0.5mm or 1mm from the gingiva, depending on the location of the demineralisation. The gingiva was not protected due to the thick etch that required only a two-minute placement, but a retractor was used to keep the lips out of the way. Afterwards, application of Tooth Mousse Plus to the conditioned area was completed (Fig. 6). Patient compliance and hardness of the enamel and decay was evaluated as well.
The Goals
The Restoration
Treatment plan consists of two components: At-Home Protocol and In-Office Protocol.

- Compliance by the patient was excellent.
- At the end of four weeks, decay was already hard upon exploration and could not be scooped with a spoon excavator.
- Existing decay was removed, enamel edges were bevelled and the teeth were restored with composite.
- The enamel was no longer flaking and majority of the decalcified enamel lost its yellow and white appearance, which would suggest re-calcification.
- Whitening was done with a take-home gel after restorations were placed. Previously fabricated whitening trays were used (Fig. 7).
- Clinical and patient pre-operative goals were met. Overall, the teeth are healthier and stronger with a natural, bright smile gained through a conservative approach (Fig. 8 to 10).

Post-Operative Care
Whitening trays without reservoirs were made for the patient for use at home. At-home instructions consisted of excellent oral home care, application of the Tooth Mousse Plus two to three times each day (by hand, per manufacturer’s instructions) and application of Tooth Mousse Plus to teeth prior to bed followed by insertion of whitening trays so that the paste can remain in the affected areas longer. DA

*DISCLAIMER:
Tooth Mousse Plus is also marketed under the MI Paste Plus trade name in other regions.

About the author
Sam Simons, DDS is the founder and president of Allstar Smiles and Allstar Smiles Learning Centre. He teaches postgraduate courses via his Learning Centre in Bolingbrook, Illinois and throughout the US.