

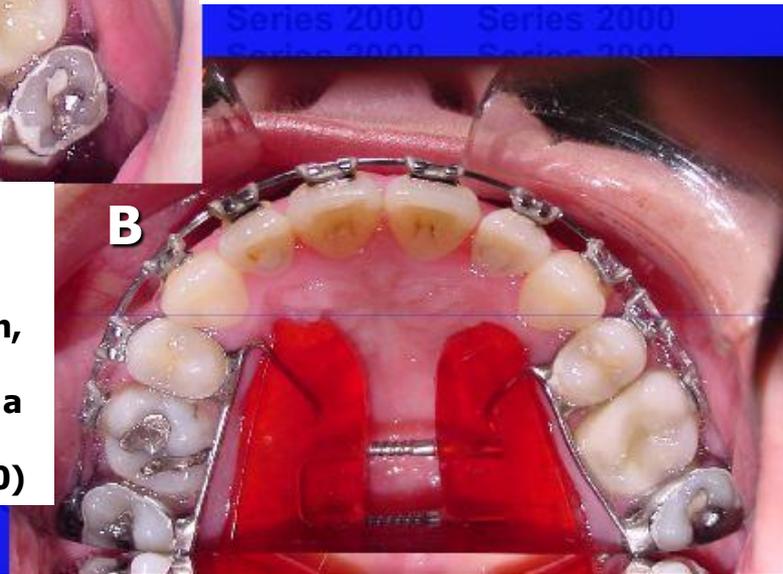
Maxillary Alveolus Development - Dental Arch Expansion Appliance the Max 2000[®] *



Notice how much better the image in B looks. That's because it replicates nature more perfectly by "saving body parts"
-- i.e. not indiscriminately extracting teeth. When it is necessary to achieve a patient sanctioned goal extractions should be done reluctantly as a last resort. In today's orthodontic community, this is not the common standard. It is our policy and as a periodontist I believe it is our categorical imperative...

..."I feel that extracting teeth just to give someone a better smile is often tantamount to amputation in medicine...the side effects are worse than the problem to be treated. Extraction, like amputation is a primitive albeit definitive course of therapeutic action to be used **ONLY** as a last resort."

-- Professor Neal C. Murphy (UCLA, 1981-2010)



* Available exclusively through Dyna-Flex Laboratories, St. Louis, MO USA

Alveolus Development for broader smiles and more esthetic facial development. This is not stable if done rapidly and non-surgically. It is however more stable if dentoalveolar surgery is employed (Wilckodontics™) or the supporting bone is enlarged naturally through tissue engineering and facial growth guidance. (Williams Method*)

The crowding or “crooked teeth” is eliminated by making the supporting bone (alveolus) bigger. I feel that most injudicious extraction of perfectly healthy teeth in children and adolescents is ill-conceived in modern biology. *To gain room in a dental arch by extracting teeth is like cutting off you toes so your shoes fit better!*

There are better ways. They take longer but when you know you’re affecting the face of a child for a lifetime – it’s worth the time and cost.

For the biologic explanation of this treatment see:

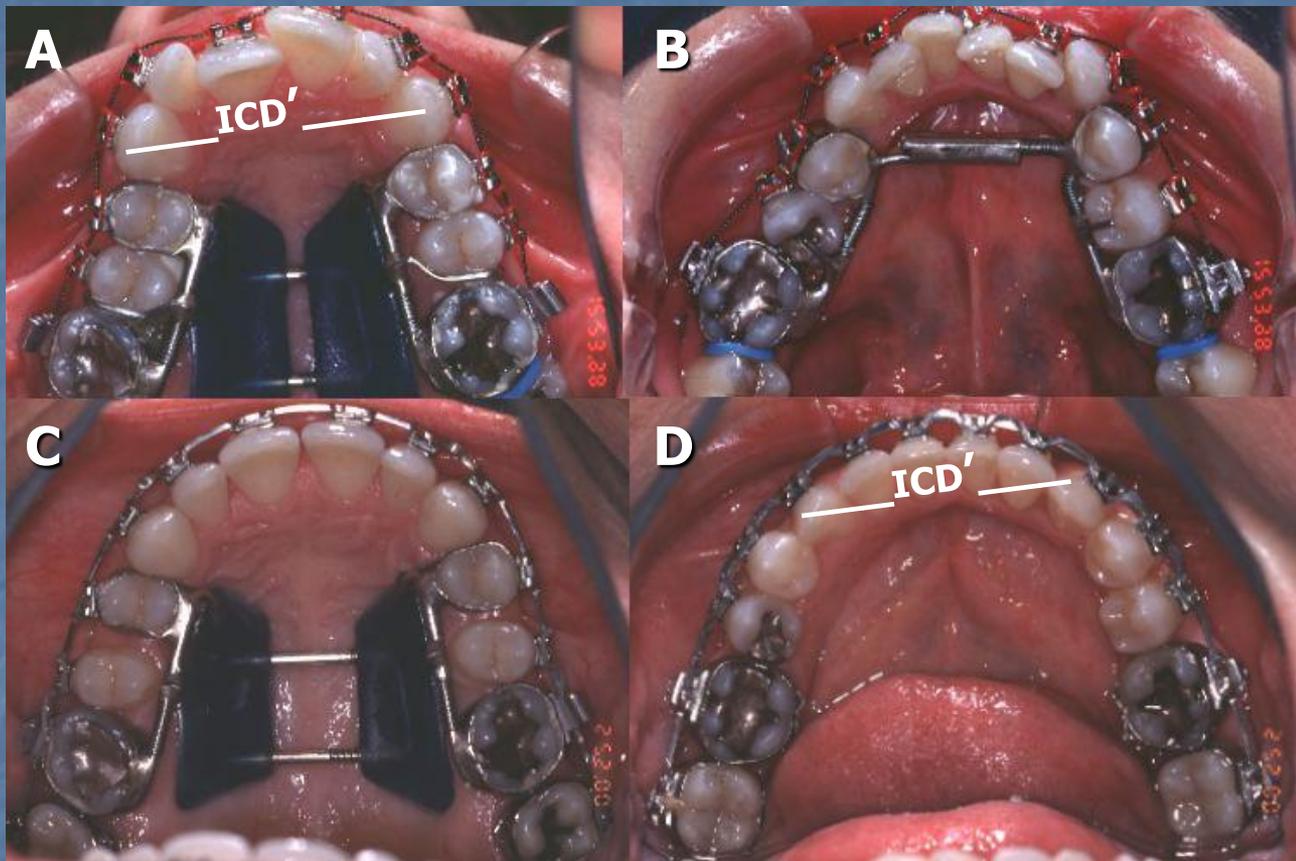
- 1. neal murphy Beyond the Ligament at:
www.google.com**

...and...

- 2. Murphy NC, “Tissue Engineering for the Orthodontist at:
www.universityexperts.com**

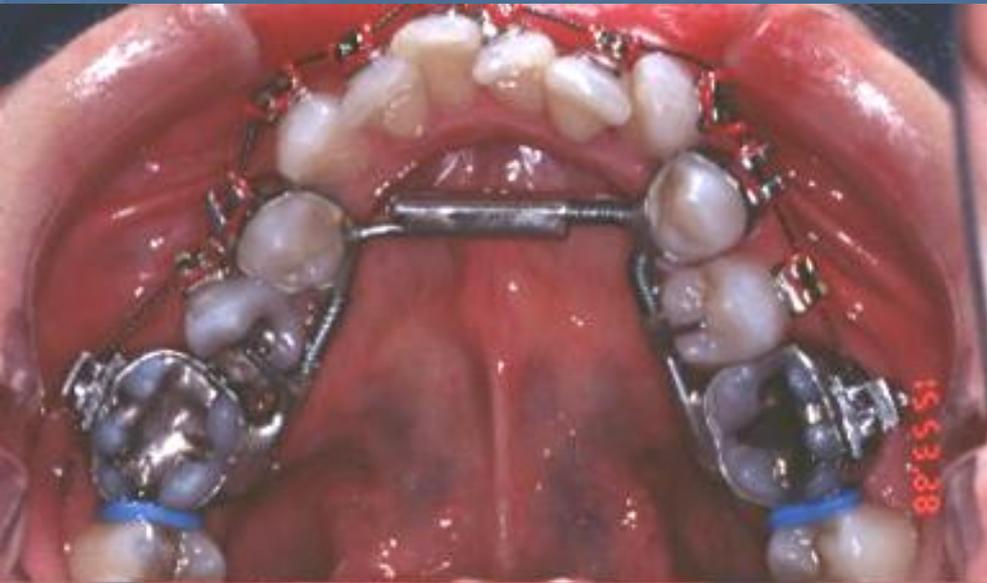


4 Stages of Arch Development



Note the narrow arch in A has been gradually enlarged (developed) into D. In this case the intercanine distance ICD has been slightly decreased ($ICD < ICD'$). If the distance is iatrogenically (through treatment) increased it can be reduced through judicious interproximal enamel reduction (IPR) or so-called "stripping".

Lower Alveolus Development



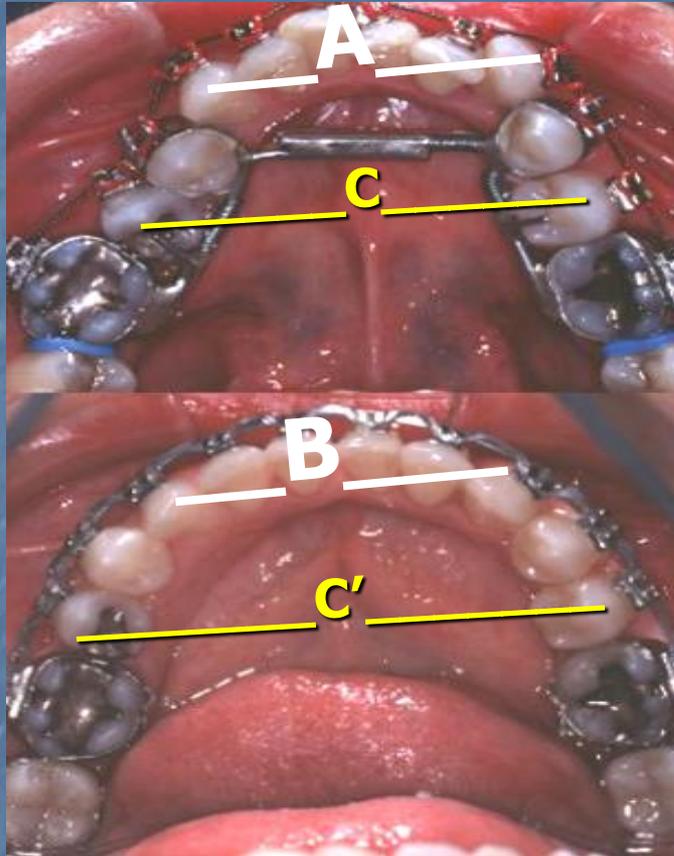
To ensure that the alveolus bone follows the tooth movement normally (physiologically) the dentition must be relatively free of pathological bacteria.

Toxins produced by (gram -) bacteria can inhibit the growth of cells that create new bony architecture.

Note: new growth of bony support at the **arrow** (←)

Note: Intercanine distance not changed.

Query: If the human face grows down and forward
Then how do we ever justify head-gear and dental Extractions and -- thus the lower face of a child -- upward and back?



Note:
A = B and
C' > C)

The key to successful arch development - making the supporting bone bigger To avoid extracting bicuspid teeth - is to expand (slowly, in health) the bicuspid and molar areas of the dental arch (C & C'). This makes a smile that fills the side of the mouth, shows lower teeth in the smile and protrudes the smile forward concomitant with the growing face of the adolescent child.

Images compliments of Dr. Michael O. Williams DDS MS Gulfport, MS USA

These images represent non-extraction philosophy & dentoalveolar orthopedic development: A narrow arch expanded..... at the alveolus bone. This mechanism has also been demonstrated by Dr. Dwight Damon and confirmed repeatable with biopsy.



If one is concerned that extraction therapy has unnecessarily "dished-in" the Lower face with injudicious bicuspid extraction, take heart. ***It can be reversed!***

Maxillary Alveolus Development

Note: No Intercanine expansion



Note: expansion of dental arch
at the bicuspid/molar region

Notice how much room the smile occupies in the face of this adolescent (A). Large eyes and fully developed large smiles are the hallmarks of youth and the key to a beautiful lower face. Now, look at what happens proportionately as this child matures...

The face enlarges through adulthood (B) but the eyes and teeth do not. So proportionately the smile gets "smaller". Woe to those who extract teeth during orthodontic therapy... that retards facial growth and gives appearances like those in the lower right, where lower facial growth has been restricted.



CRITICISM? ...Judge for yourself.

Sometimes we are criticized for making such large smiles in children and adolescents. This is spurious criticism because, as Dr. Michael Williams notes:

“It is better to give a child an adult smile one can grow into than an adolescent smile one grows out of.”

...Look at the “big” smile in the adolescent below (left) and compare it to the beautifully proportionate lower face it makes in the adult (below right). It’s the same smile! ...teeth don’t enlarge with age. -- Case Closed!

