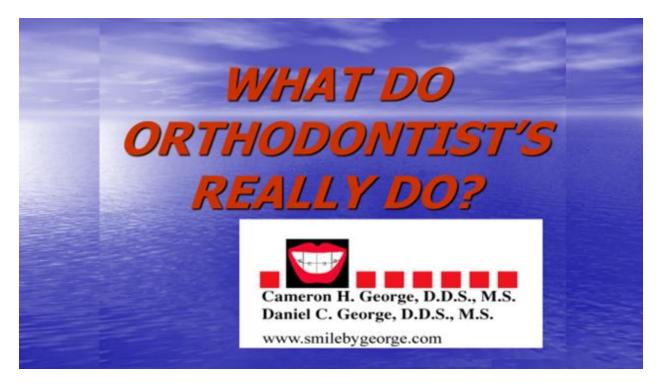
Holland Professional Club October 3, 2024 What do Orthodontists really do? Daniel C. George D.D.S., M.S., A.B.O., F.A.C.D., Emeritus

I would like to say that I am honored to be the first member to present a program about my profession, when the rule was overturned, which prevented a member from presenting a program about his own profession!



Orthodontists specialize in diagnosing, preventing, and treating dental and facial irregularities, with their most well-known role being straightening teeth. However, they do much more than that!

Definition:



Here are several other responsibilities and treatments Orthodontists handle:

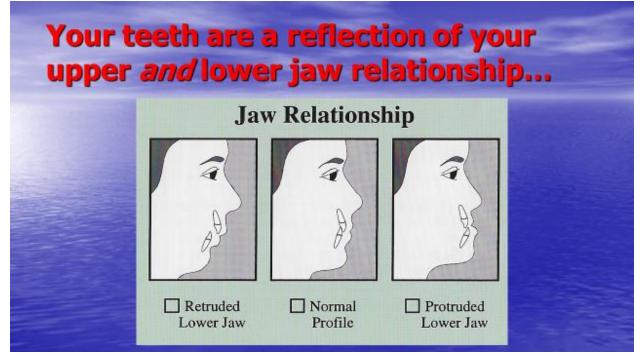
1. Bite Correction [known as malocclusions]

 Orthodontists correct misaligned bites, such as overbites, underbites, crossbites, and openbites, and asymmetries.
This helps improve chewing function and prevents longterm dental issues.



2.Jaw Alignment

-Orthodontists treat jaw misalignments or imbalances, which can lead to conditions like Temporomandibular Joint [TMJ] disorders, causing pain, or discomfort in the jaws. They also deal with controlling, or redirecting facial growth to improve facial balance.



3.Dental Space Maintenance

-When a child loses a baby tooth prematurely, Orthodontists may place a space maintainer device to ensure that the surrounding teeth do not shift into the gap, preserving space for the erupting permanent tooth.



So Managing tooth eruption is important to monitor and guide the eruption of teeth in children, addressing potential issues early to avoid more complex treatments later on.

4.Correcting Speech Issues

-Misaligned teeth and jaw problems can lead to speech difficulties. Orthodontic treatment can help correct these issues. Sometimes it requires a multi-discipline approach with a Speech Therapist, and Physician.



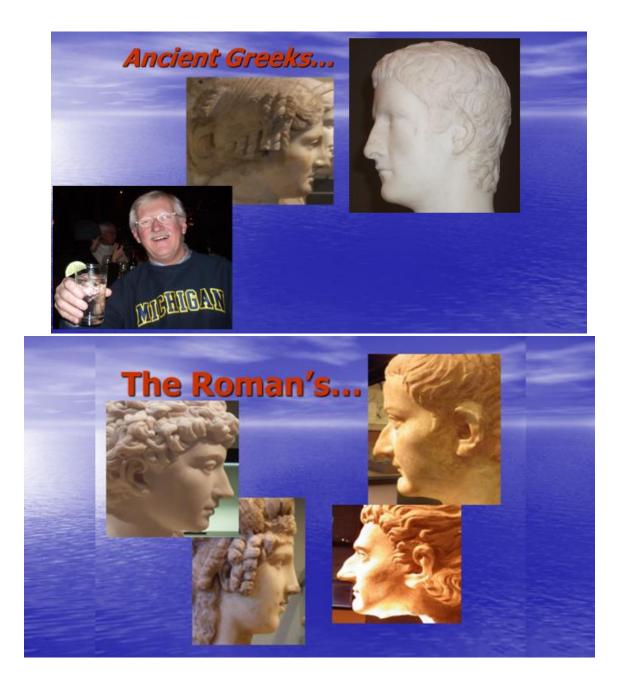


5.Facial Aesthetics

-Orthodontists work to improve overall facial harmony by aligning the teeth and jaws in a way that enhances facial aesthetics, particularly in more severe cases of jaw deformities.

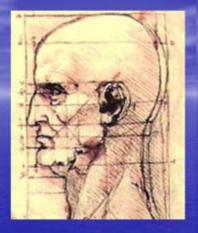
- What, and who, determines what is a 'good looking face?'

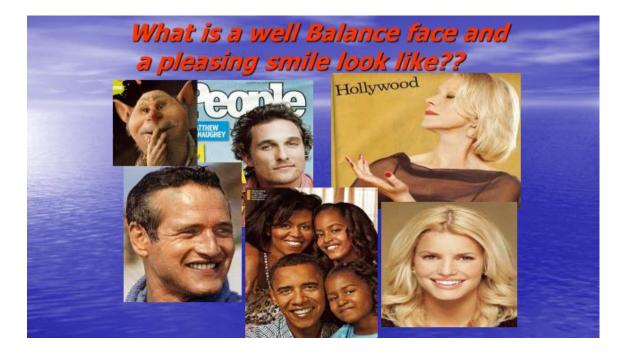




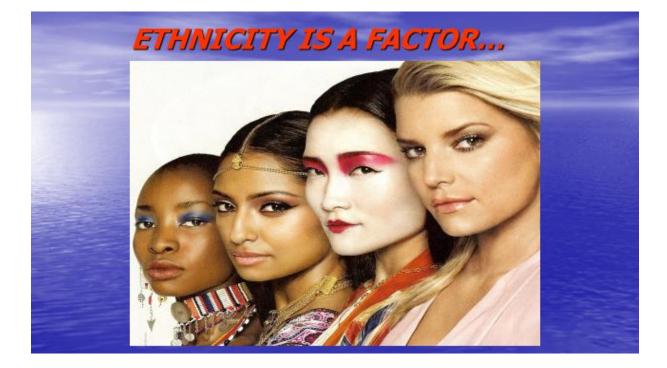
Leonardo da Vinci was the first to quantify the face in 1490!

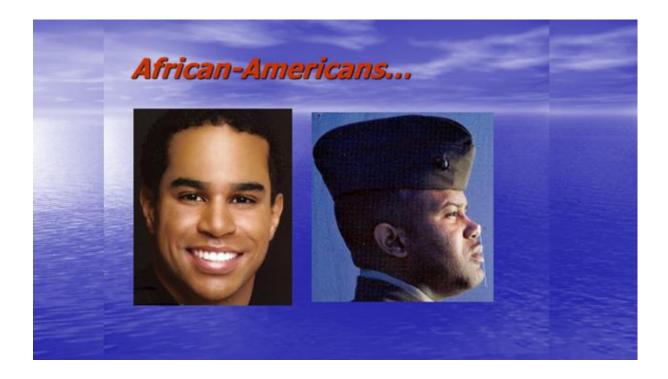
Fig 2. Leonardo da Vinci's Male head in profile with proportions, ca 1490. Vitruvian anterior vertical facial thirds are evident: hairline to eyebrows, eyebrows to base of nose, base of nose to below chin. Lower facial third is again divided into upper third (upper lip) and lower two-thirds. Ear is one third of facial height. What later came to be described as Frankfort plane and its perpendicular, facial vertical from soft-tissue nasion, are also shown (courtesy of Gallerie dell'Accademia, Venice).





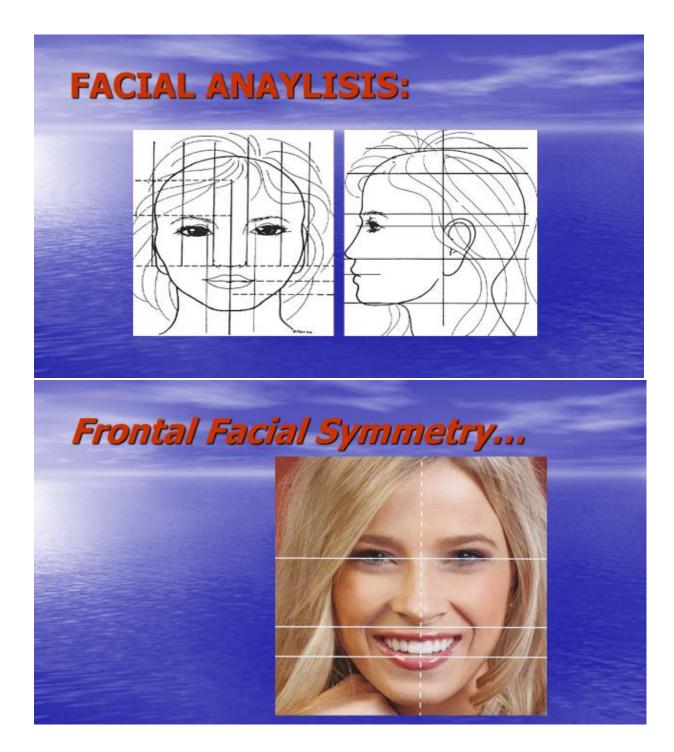




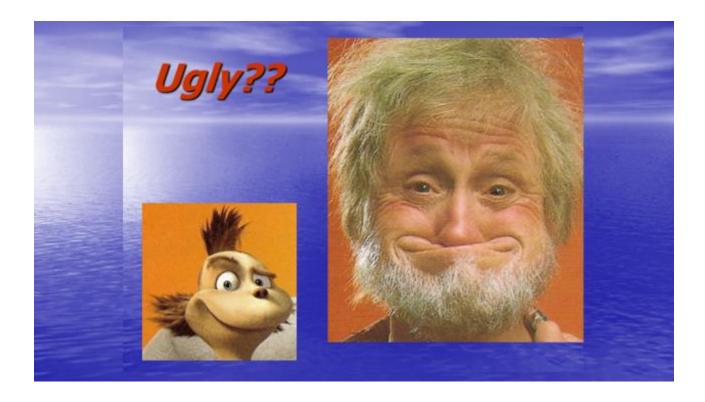




Today, Orthodontists quantify every patient's face we treat!



- So this begs the question of does an 'ugly face' look like?



Ironically, there were a number of faces right here in the Holland Professional Club that fit into this category! For HIPPA reasons, I cannot include them in this online presentation! Those who were present know who they were. However, it goes to show one that good looks and brains do not necessarily go together! "Beauty is in the eye of the beholder." ©

6.Pre-surgical Orthodontics

-Some Orthodontic problems are beyond what can be achieved by Orthodontic treatment alone. Thus Orthodontist will align the teeth, coordinate the upper to lower jaws, for corrective jaw surgery [Orthognathic Surgery] ensuring that both the teeth and jaws are in the best position for surgery



Before x-ray

After surgery x-ray

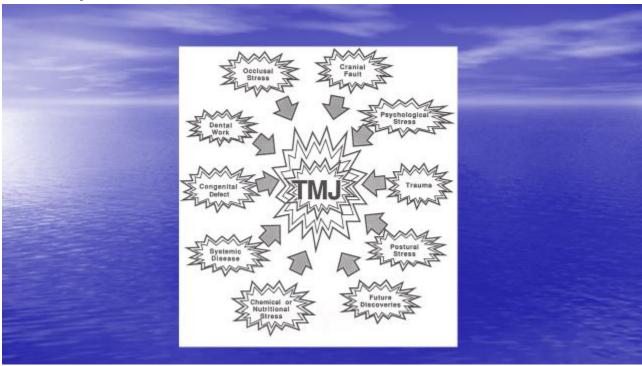


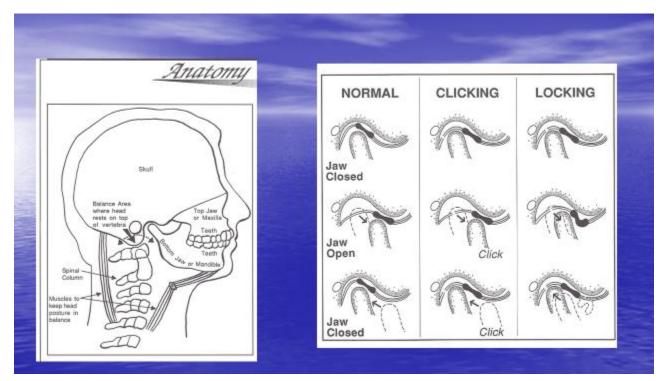
Before Orthodontic-surgery After surgery and Orthodontics

Note: facial photos not shown for HIPPA reasons

7.Bruxism [Teeth Grinding] Treatment

-People may grind, or clench their teeth, for a variety of reasons, most notably from daily stressors. Taking one's daily stress out on one's teeth is a very common occurrence. There are appliances like mouth guards that are used to prevent wear and tear on their teeth. Stress management is also helpful.



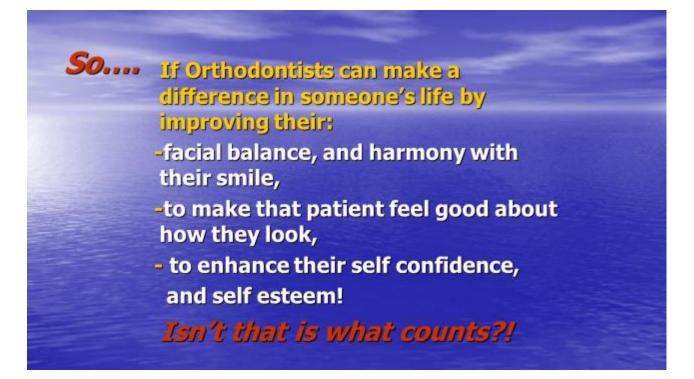


TMJ abnormalities can cause lifelong issues

8. Retainers and Post-Treatment Care

-After Orthodontic treatment, Orthodontists provide retainers to ensure that the teeth stay in their new positions. They may also offer ongoing monitoring and care.





In SUMMARY:

Orthodonists contribute to both functional and aesthetic improvements, and address a wide range of dental and jaw problems beyond just straightening teeth!

