CAN JAW SURGERY BE AVOIDED?

Orthodontic research suggests that it is not possible to increase jaw growth by more than two or possibly 3 millimetres. So if a child has an overjet (the top front teeth stick out) more than about 5 millimetres then the lower jaw needs to be cut into three sections and bolted together in a further forward position.

New techniques such as orthotropics claim to make the mandible (lower jaw) grow naturally for 20 or even 30mm. This could improve the appearance of the face substantially. Many Orthodontists and other clinicians talk about improving faces but their pictures are mostly of teeth only or of fashion models who have never had treatment.

Orthodontists say they can't show faces because of confidentiality but most Orthotropic patients appear only too happy to show their facial improvement. People generally think good faces matter more than straight teeth so look at the cases below.

This is a collection of my own orthotropic results collected over a period of about fifteen years as I improved the Stage 3 locks and increased the forward growth by progressively reducing the Indicator Lines.

An increasing number of clinicians are now doing Orthotropics but as yet there is little training so be cautious about accepting those who make claims and ask to see pictures of their previous cases. I do want people to realize faces can be substantially improved especially if you are under 20

• •

I find that Fixed Appliances (train tracks) often damage the face and shorten the life of the teeth by 5 to 10 years. Also the teeth tend to go crooked again unless held in position permanently. Orthotropic appliances improve the face naturally so the teeth stay straight for ever. You may copy any of these photographs but please give acknowledgement.

Class II division 2





Age 15



Note also the change in molar relationship

Victoria. Note how

the ascending ramus

has moved back from

the lower second

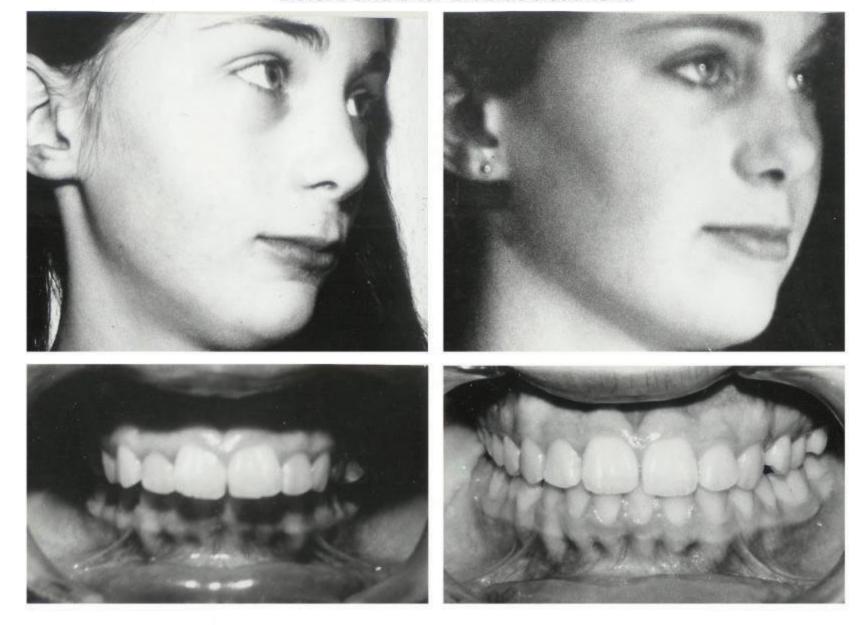
for the wisdom.

molar leaving room

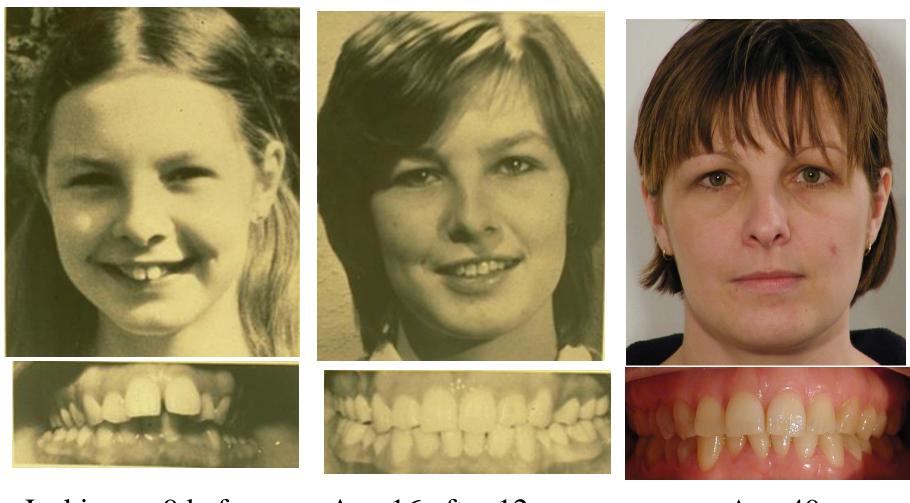




Before and after Biobloc treatment.



Session 10 Semi-rapid Expansion

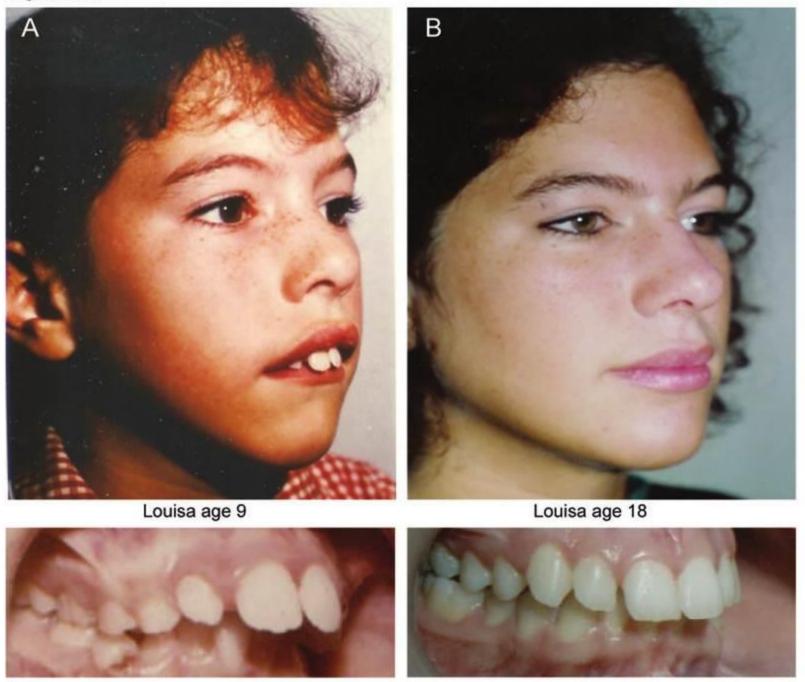


Jackie age 9 before Bio-block

Age 16 after 12mm of expansion

Age 40

6



Christine aged 8

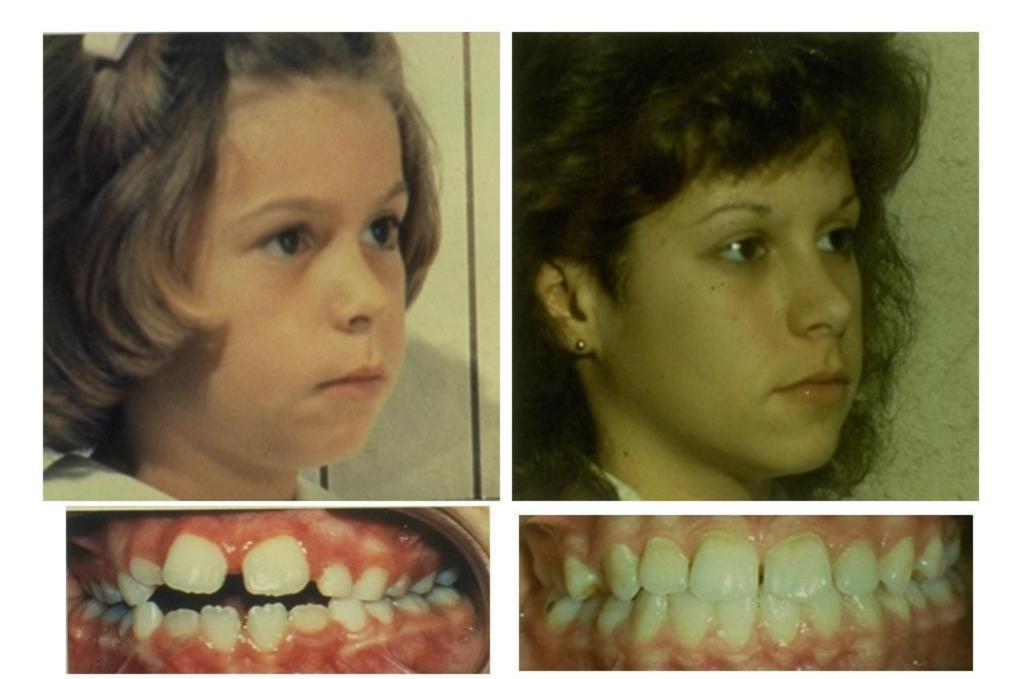


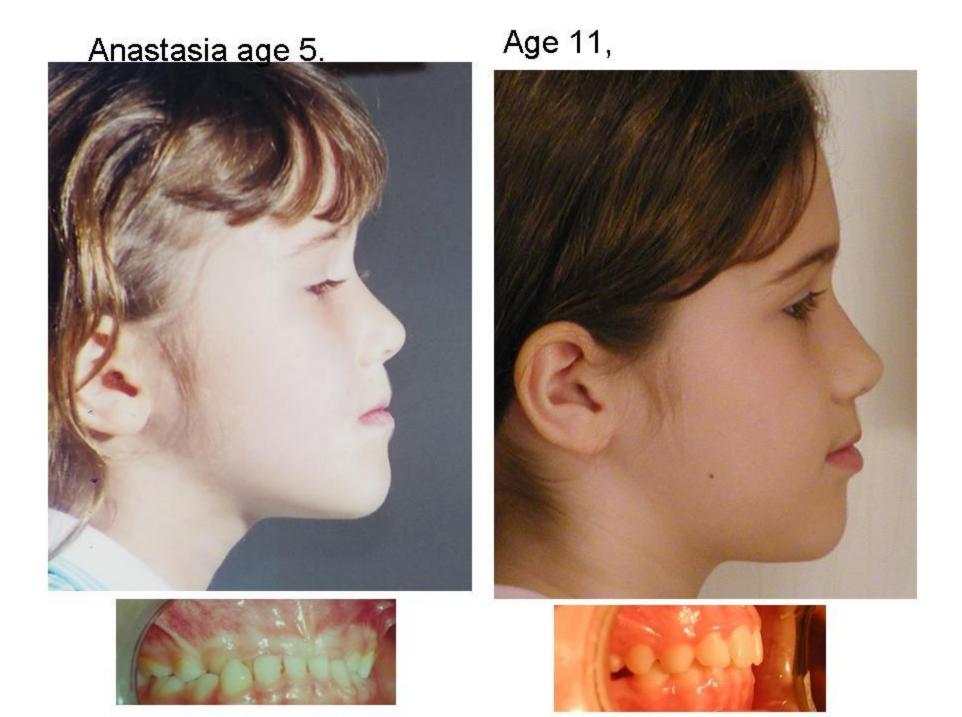












Adult Treatment.



Bartle

Age 23 Age 26

Biobloc treatment instead of surgery.









James age 11

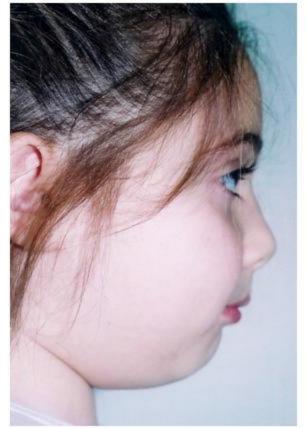




Age 16



Antonia.



She had a condition known as Micgrognathia where the jaw fails to grow. She had been told to wait until she was eighteen and have her jaws cut and repositioned.

She was treated with Biobloc Orthotropics with No surgery, No extractions, No Train Tracks, and No retainers.



Age 13





Four months later





MICROGNATHIA

Claire age 10



Growth Direction 65°



Age 18



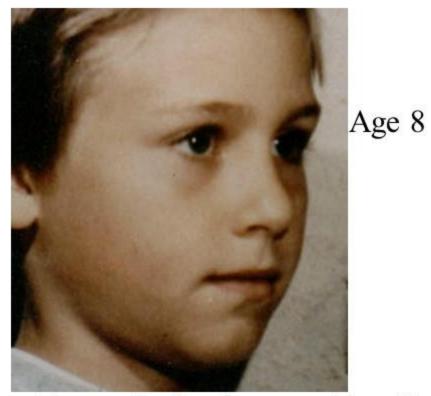




After 6 months

Semi-rapid Expansion





Ben

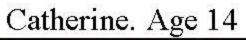
Eighteen months later



Few orthodontists consider 'functional' treatment for class I cases.











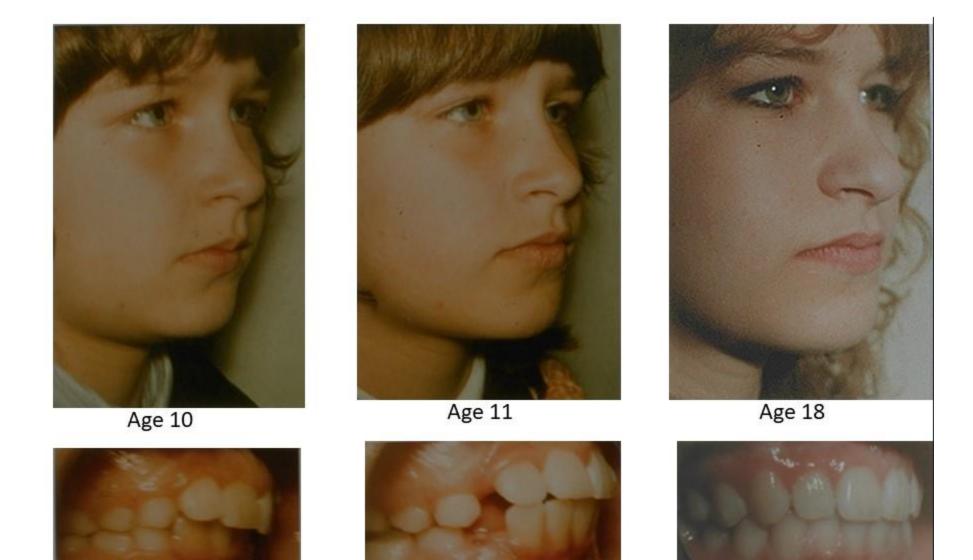


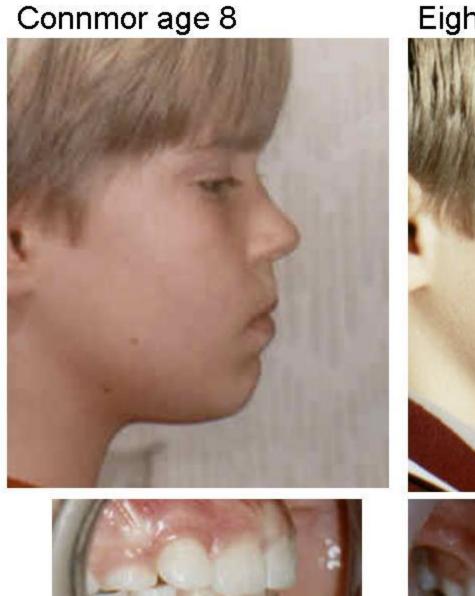




"My friends don't recognise me"

Class II division 2







Class III malocclusions



David was treated with 9mm of expansion and a Purley wire, followed by a Stage 3 and then a Vestibular Trainer.

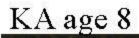














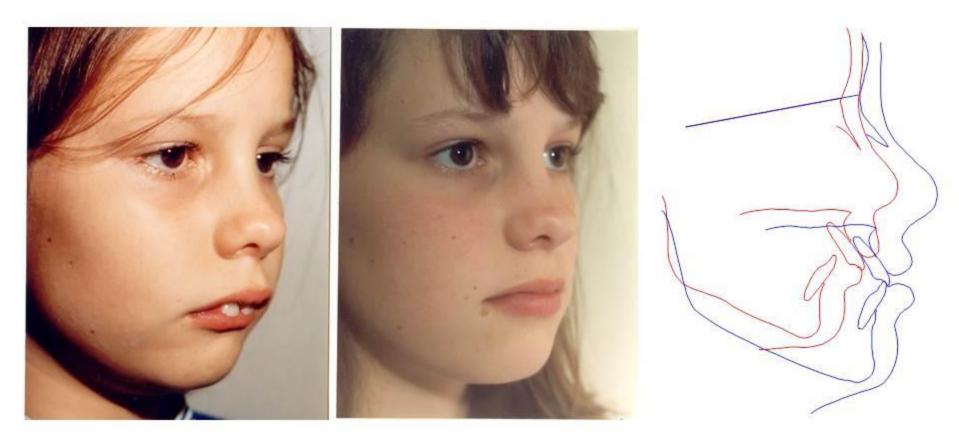
Age 14











Emily age 8

Age 12.

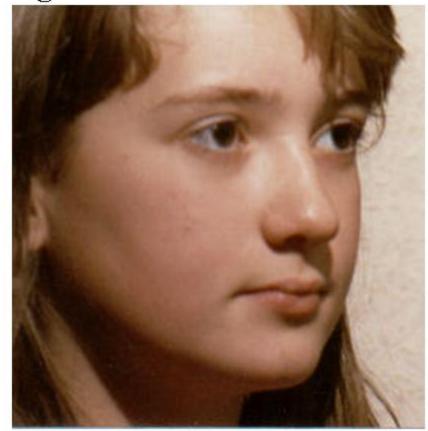
Downs point 'A' moved forward 11mm,

Gnathion grew forward 27mm at with a growth direction of 37 degrees.

KH. Age7











Expanding the lower arch with the 'locks'.



Age 10/6



Charlotte. She had the normal sequence of stage 1, 2 and Stage 3 The upper expansion was 9.3mm and the lower arch widened automatically 1.7mm. The 'Anterior' and 'Hard' locks were then activated four times to achieve a further 3,2mm widening. Did her treatment help her to become Head Girl?





Age 16/0





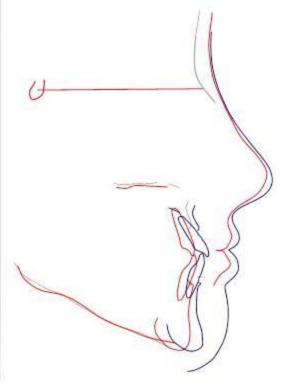
Simon Age 12



Four months later

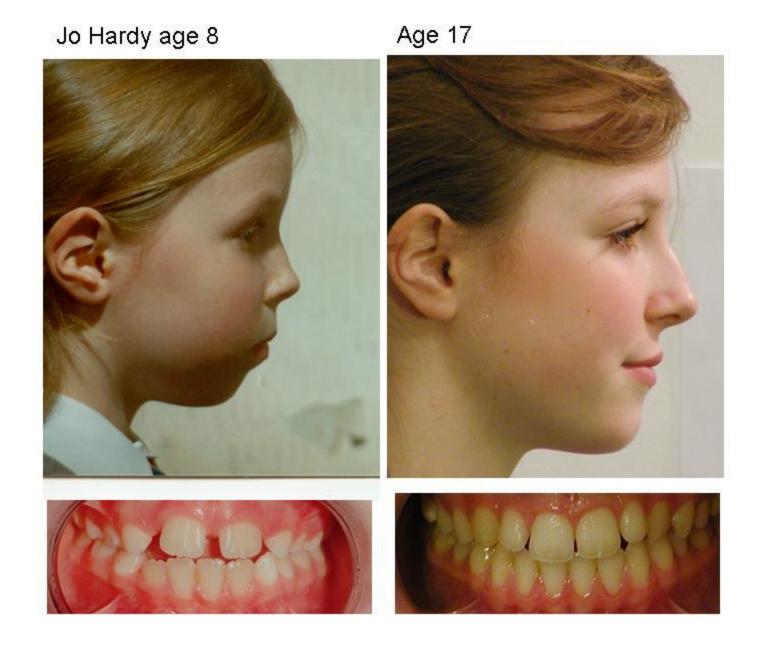


Note how reducing the Lower Indicator Line corrects a pointed chin



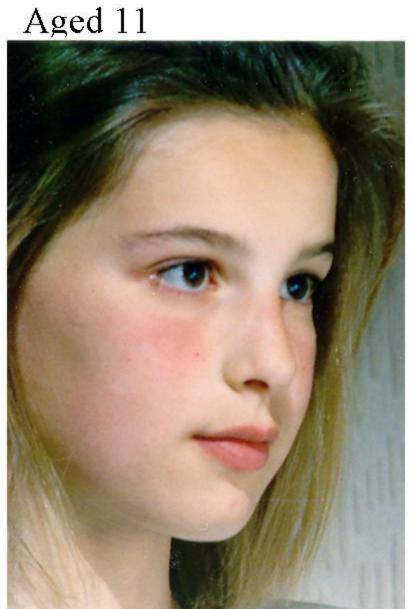
Age 20.





Kelly age 7









Ollie Age 13

Age 15







Age 9



Age 11



Louisa age 9



Age 10





Maxilla came forward 12 millimetres Gnathion 21 millimetres.

Deciduous Extractions.



ER Age 10



5 months later



Age 11 after extraction of the deciduous teeth.







The indicator line was corrected creating an open bite and the incisors and first molars were all intruded.

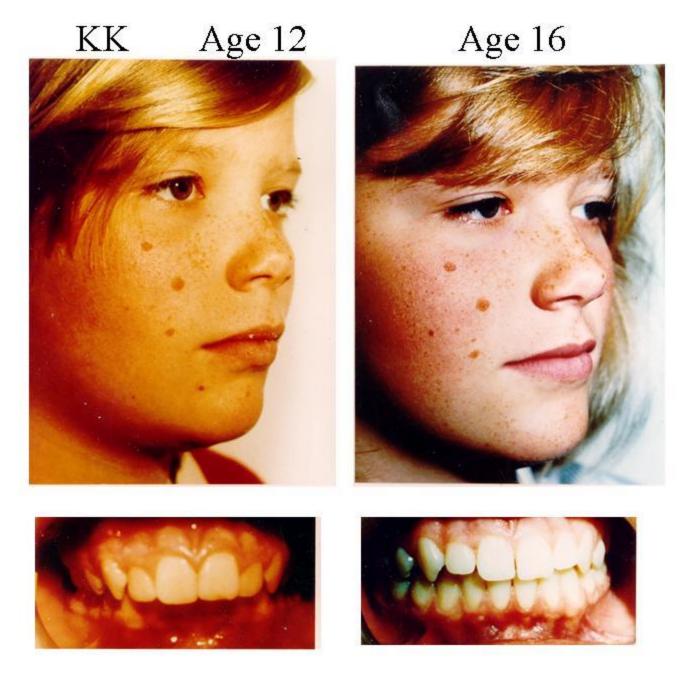
MH aged 8













Emily age 8



Age 14





This girl made slow progress with her Stage 3 because she wore it only 14 hours a day, despite her mother's encouragement.

Her mother then said "you might as well stop" and she subsequently wore it 22 hours a day to get this result.





11mm overjet.



Five months later, end of Stage 1, 16mm overjet.





H.B Age 9y 9m





Age 12y 1m



Parisha age 8.





Note how encouraging forward growth of both jaws with Orthotropics provides room for the teeth.





What does forward growth do for adults?

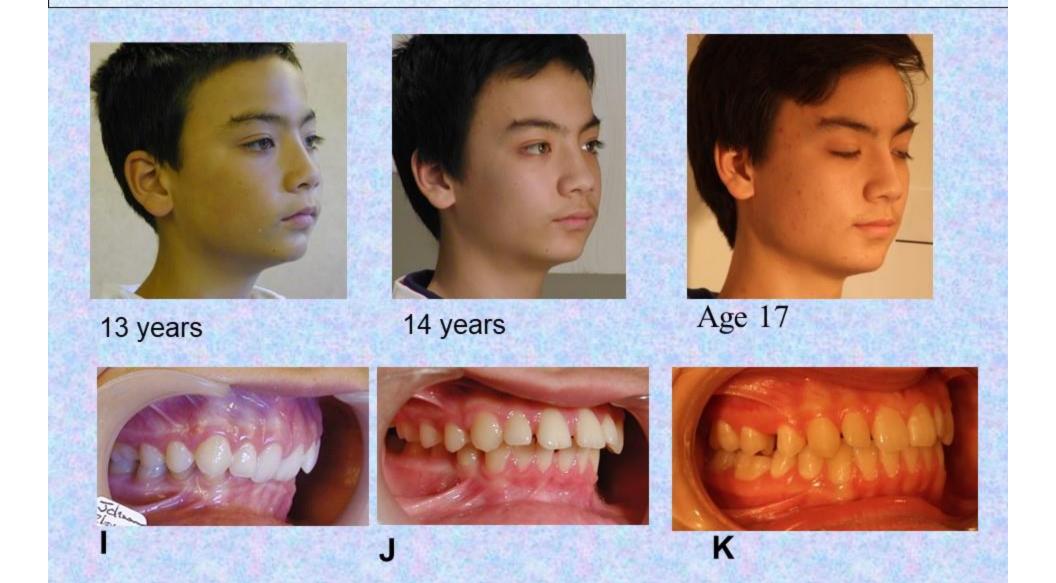
Before 9-8-01. Age 37.



After first stage 7-2-02



Class II division 2





Before



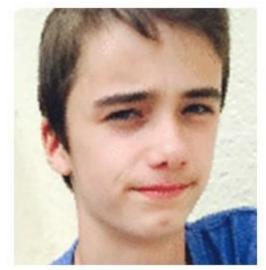
After expansion, headgear and training











Stanley Age 13 before treatment?



Eight months after Stage 1 and 3 Biobloc



Impacted canine age 13.

When he was 13 his dentist first noticed his /3 was un-erupted and sent him to an orthognathic surgery unit. They said only surgery could correct it. He asked for a 2nd opinion and after eight months of Orthotropics to correct his oral posture it erupted spontaneously. This suggests that all teeth 'know' where they should erupt and only fail if the posture is wrong. Look at the change to his facial bones.

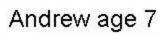


Canine erupting spontaneously 8 months later

Teeth age 15.











Age 15



Delphine age 15.4

Delphine age 17.7

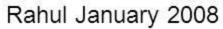


















December 2008. Note lip form.



The Stage 1
appliance with
a flange and
10 mm of
expansion
used to
correct his
cross bite

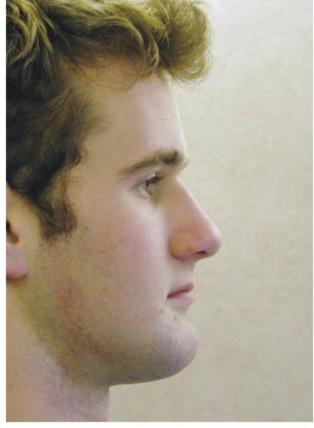




He stated with an Indicator Line of 40mm (=+7) and reverse overbite in hinge axis of 4.0mm.

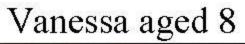
Forward pull headgear plus semi-rapid expansion was used for 4 months, to create an overjet of 5mm. He was then given a Stage 3 to train him to keep his mouth shut and improve his motor tone.

Unfortunately he was not very compliant about the Stage 3 wear and his maxilla dropped back slightly. Final Indicator Line of 45mm still 7mm over.























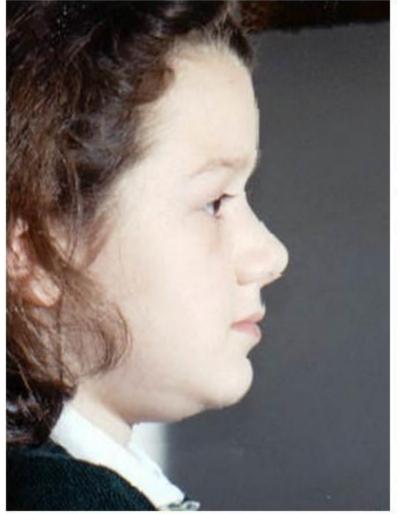
Alex age 9. 13 mm overjet. Four months later. 16mm.





After two years treatment.





Lucinda Age 9

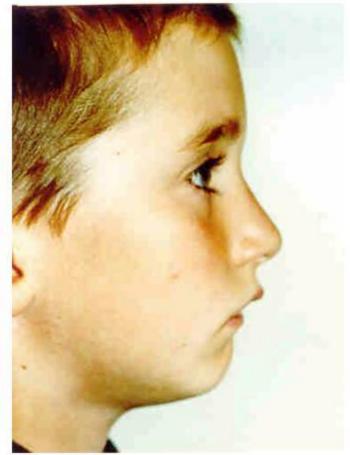


Age 16



ORTHOTROPICS

The conversion of vertical growth to horizontal



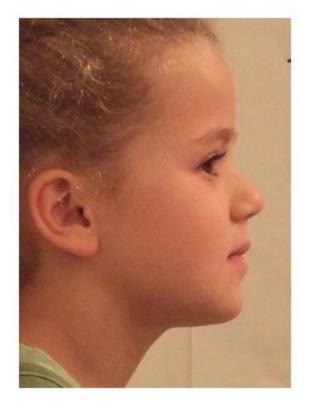
Ben age 8/5. Vertical growth





Ben age 11/3. After Orthotropics.





Kate Boswell age 8



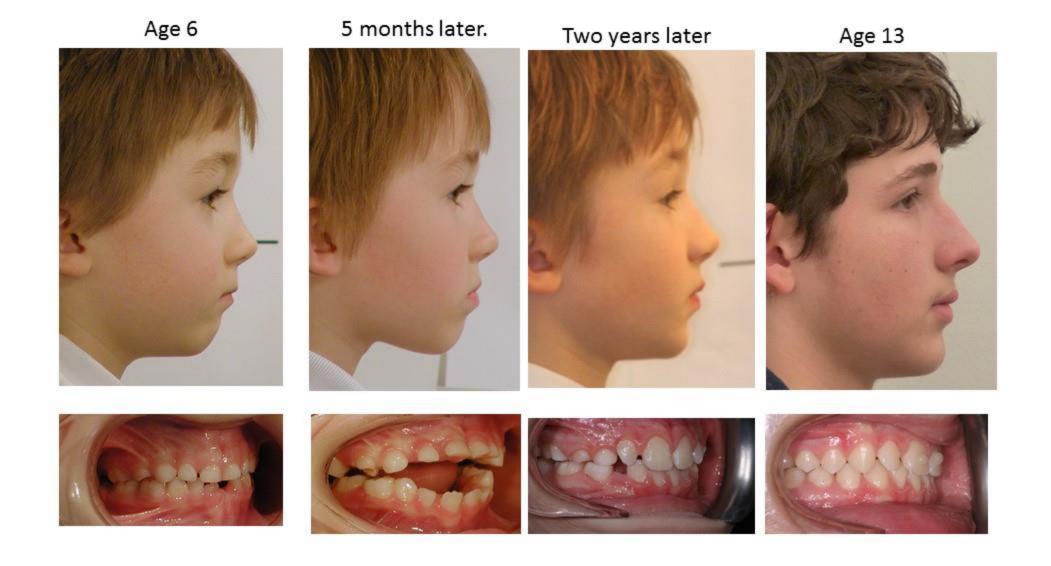
Four months later, after Forward pull Head-gear and Stage 1

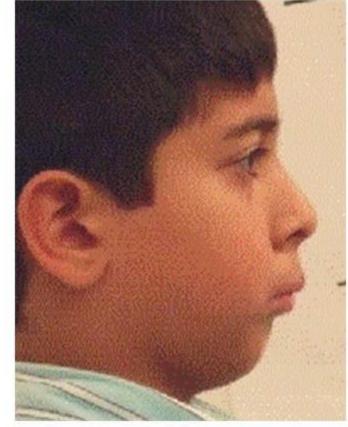




Ten months later still, after Stage 3







Age 9 Micrognathia waiting for surgery

No Fixed Appliances or Surgery

After three years Orthotropics.



NO SURGICAL OR ORTHODONTIC TREATMENT COULD EQUAL THIS.



Both arches set back.

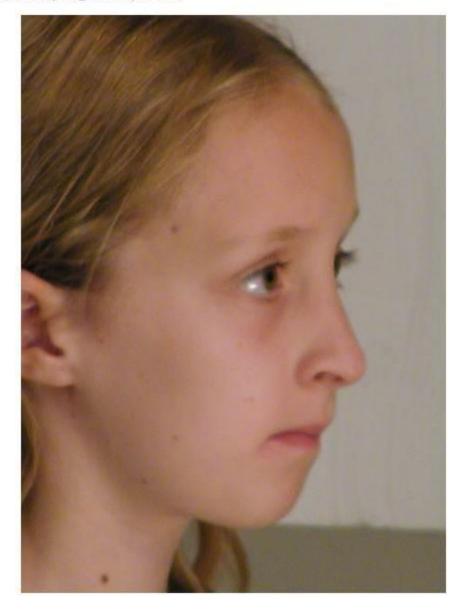


Jaws and Incisors moved forward.



Incisors have up righted in forward position.

Jenny age 10y 7m.



Before



After 2nd cycle.

Age 13y 3m



Orthotropic treatment To correct Oral Posture.





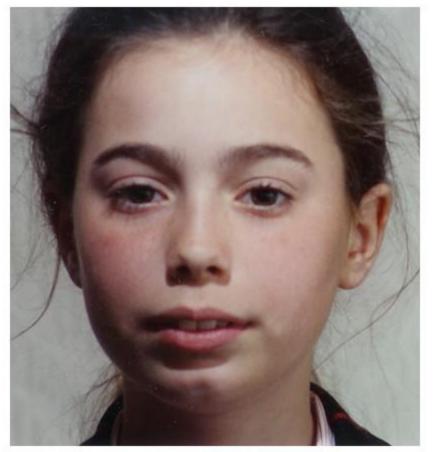
Robin age 9



Five years later night time only. later.

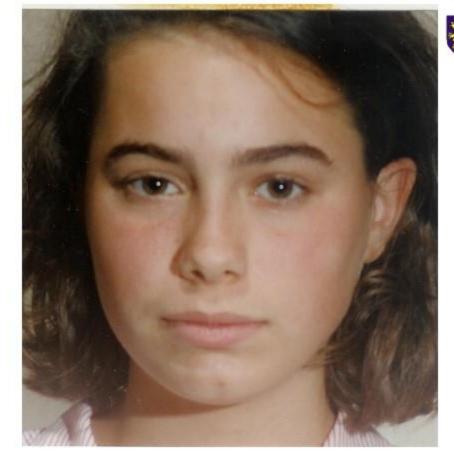






Tania age 12





Age 14

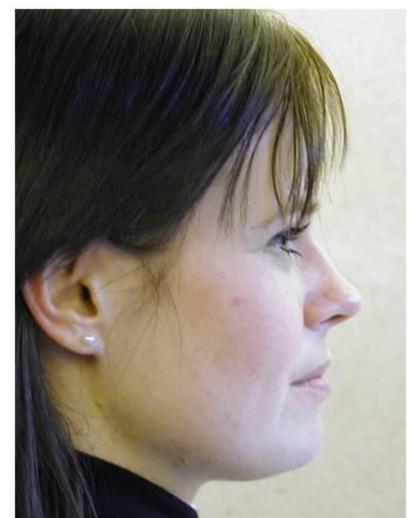




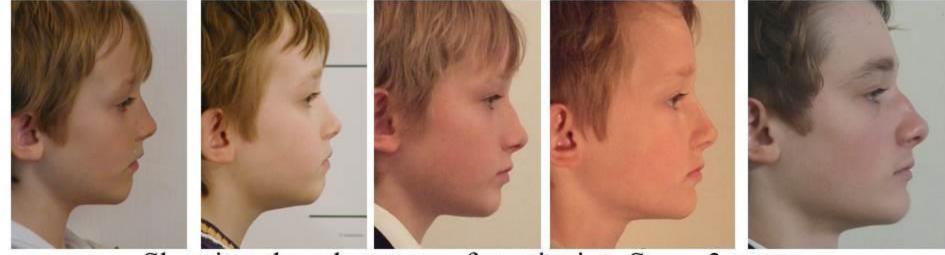


Age 30y 7m





ORTHOTROPICS



Showing the advantage of continuing Stage 3 wear.



Thomas age 8 Six mo later Age 9 desc exts Age 11 Age 15

The active treatment took one year but he continued night time training for six more years. Changing the oral posture will achieve correction for a life time. No retainers are necessary.

The Eyes are Supported by the Maxilla

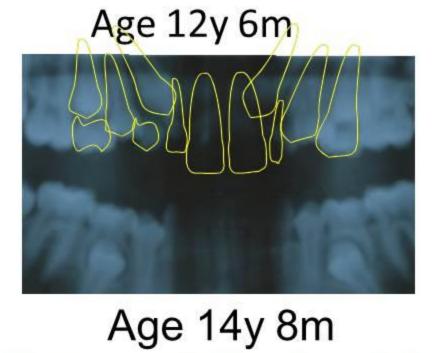


Nicholas aged 9. Note the dropped outer canthous of the eye.



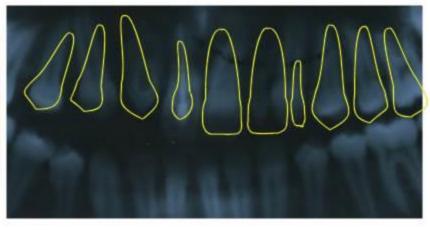
Two years later, after his maxilla had been brought forward by Orthotropics.













Age 20

Class II High Motor Tone.



Kirsty aged 8
Overjet 11mm.

The incisors were taken forward until the overjet was 16mm, this increased the open bite to 8mm.





Note the reduction of the buccinators muscles which has prevented relapse..

Age 15







Lisa Age 9

After four months

Age 14







Diane age 13. She wanted to be an Opera star



Four months later.

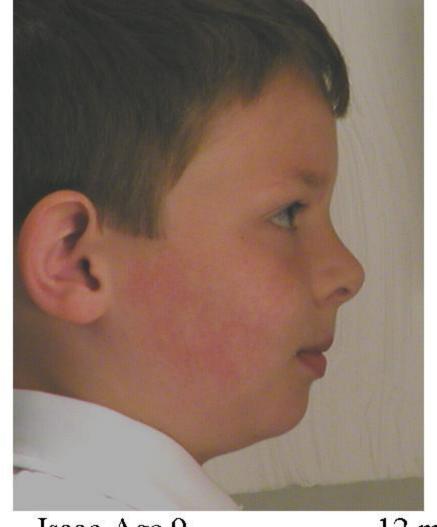


Her cervical spine



Class 1 occlusion no crowding. But she wants a better face.
What needs to be done?

Forward pull headgear and Biobloc.





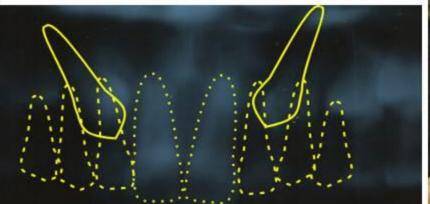
Isaac Age 9

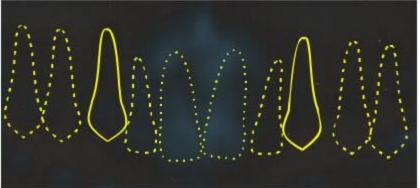




Jamini Age 14









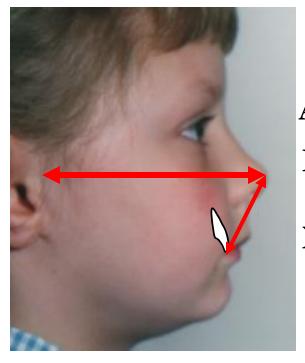
Jamini was waiting to have premolar extractions and surgery to expose her canines. Orthotropics advanced the maxilla and mandible providing room without extractions.





Lydia Johnston

Assessing Where The Teeth Should Be



Before

Elizabeth

Age 8 Age 13

Indicator Line
38 (7mm too high) 7mm of forward growth
Needs to be reduced.

Indicator Line now 40 (4 mm too high)



IL reduced by 4mm



After treatment

Henry Russell-H





Stage 1 and head gear fitted, fourteen hours a day..





After four months, expansion stopped, headgear continued.





Overjet +8mm

After seven months. Retention with Stage 1 and night time headgear.

Shifting Centre Lines



Josephine age 8. Note locked cross-bite.



Use of flange



Flange to guide mandible to left.



Four months later.



WHAT ACTUALLY HAPPENS?





X-rays of Philip Age 14. After nine 9 months orthotropics.

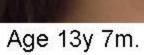
Note that the assending ramus has moved back 7mm relative to the unerrupted wisdom which now has room to errupt.



Oona age 11y 8m.

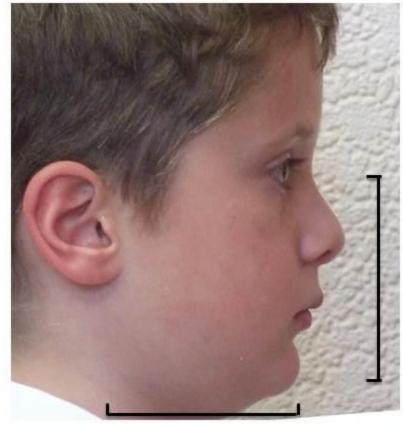












Michael age 7, no room for lateral incisor

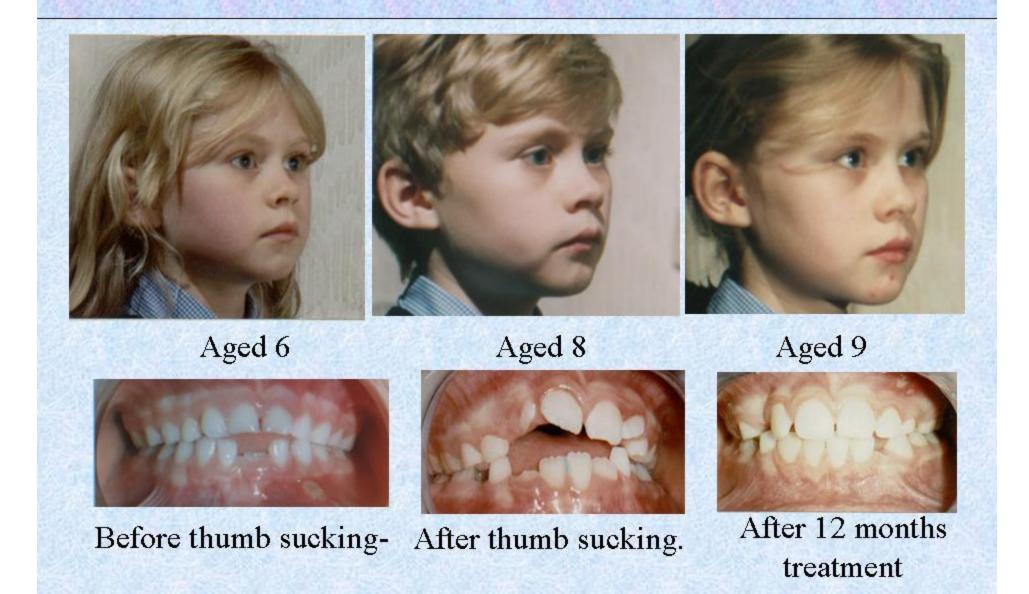




Age 12 spare space due to forward growth with very little vertical growth.



Thumb Sucking



Oral Myotherapy

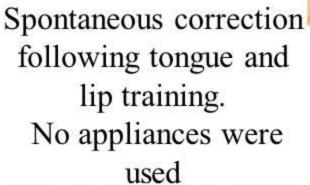


PW aged 8 and 9

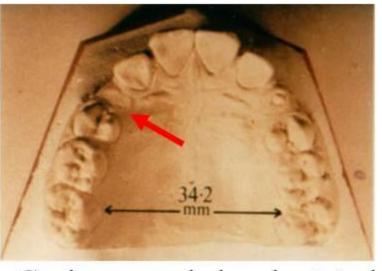




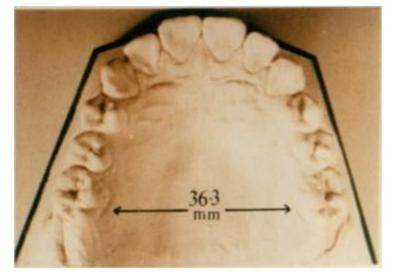
Bilateral Cross bite and 3mm open bite







Canine crowded and rotated

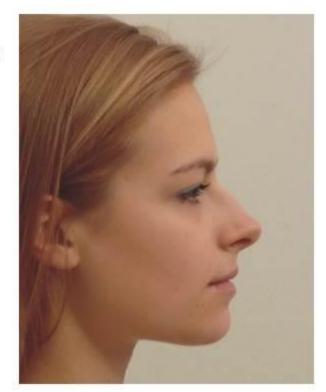


Class II/2 Problems.



Showing the advantage of expanding the maxilla even if there is spacing before treatment.

This case also illustrates how the lower arch will widen with the 'Hard Locks, and how hollow cheeks develop following a tongue to palate swallow.



3 months later. Scissors bite





After Biobloc age 19





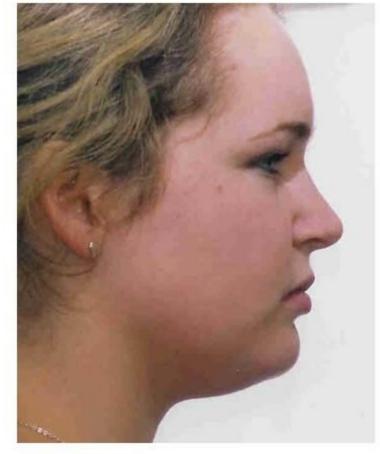


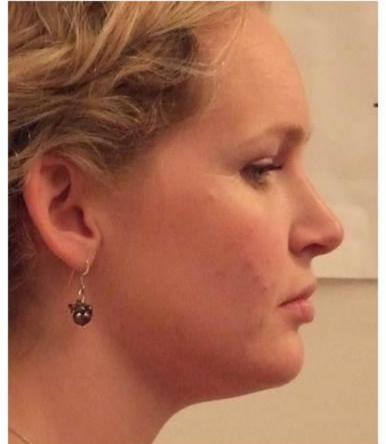
John Age 11. Waiting for surgery Age 14 after





Treated by ORTHOTROPICS, no surgery.

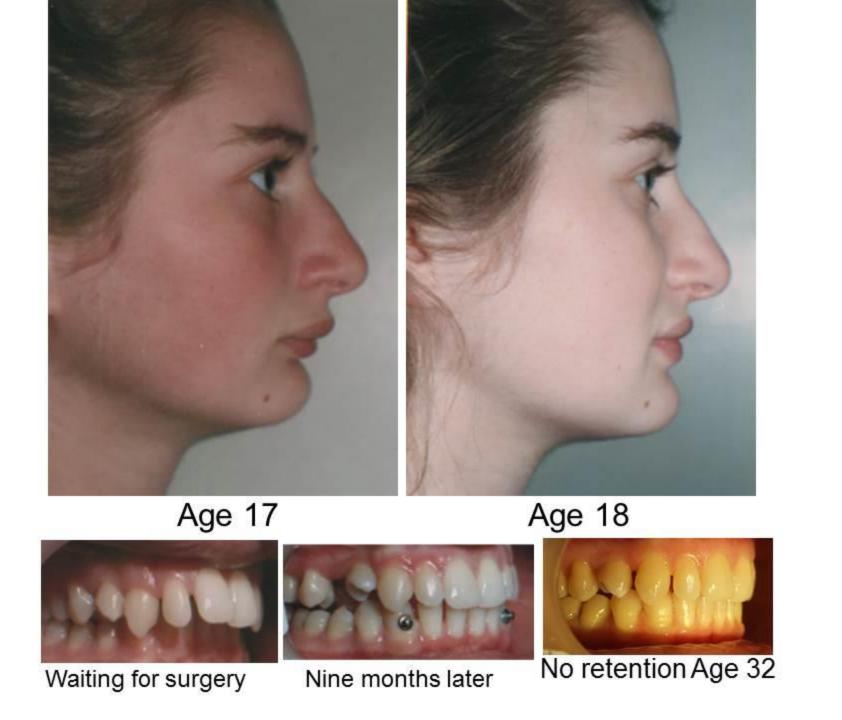




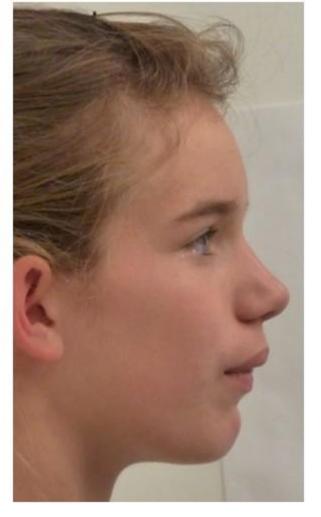
2001 age 18

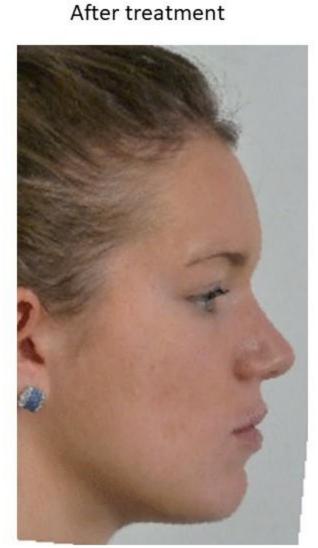
2008 age 25

She had had persistent TMD pain which recurred if she left her splint out. She wore a Stage 3 Biobloc for 20 months; look carefully at the changes in her midface. Her TMD symptoms disappeared and did not return.



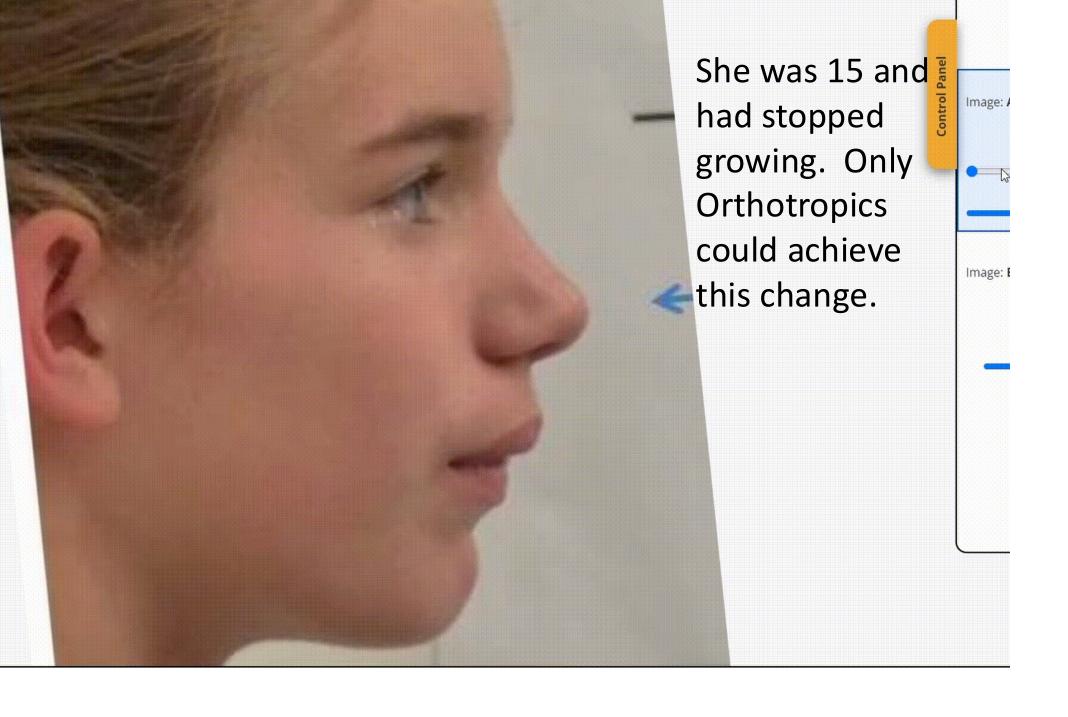




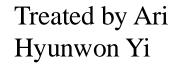


Age 15. Age 18

Horizontal growth. Before -19mm after -1mm. Growth = 18 mm









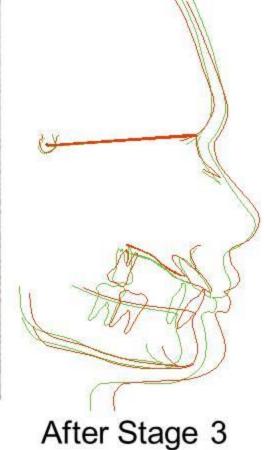


Age 30 After Orthodontics

After Stage 3 Orthotropics.

Orthotropics.





Alexis age 141/2

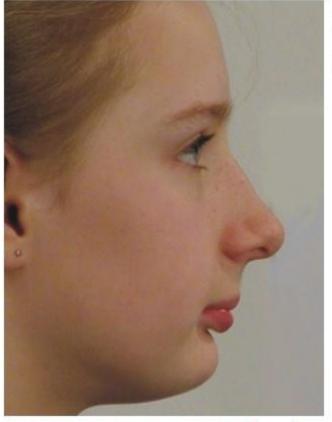


Age 17



No fixed appliances.
Note spontaneous
uprighting of incisors
and no vertical
increase despite lower
incisors on palate

ORTHOTROPIC TREATMENT.



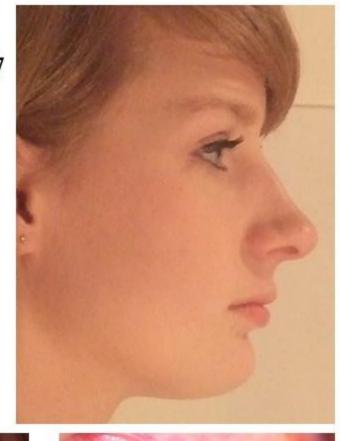
Laura Laura age 15½ age 17

She was told she would have to have surgery. Her gnathion grew forward 16 millimetres.

After Stage 1









CAN SURGERY BE AVOIDED WITH ORTHOTROPICS?

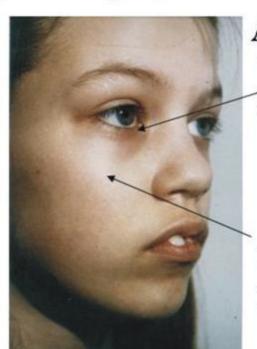
In many countries any child with an overjet of more than 5 millimetres is considered a surgical case. In the UK between 800 to 1000 teenagers have surgery each year. Between 1985 and 2000 I was asked to treat several patients who had been told they could only be corrected by Jaw Surgery. Most were class II with big overjets but some were class III. All of them except one wore their appliances well and were able to avoid surgery.

In 2004 I sent a booklet of their results to every member of the General Dental Council. All the members of the committee but one (an orthodontist) agreed that Orthotropics should be debated, however nothing happened. I presumed the executive had overridden it. Later FOI told me it was never discussed. One member was so angry that he sent me the GDC internal e-mails and resigned.

Informed Consent Prior to Facial Surgery

How Important is it?

In 1984 this girl from Tunbridge Wells was told by surgeons that her teeth and jaws could only be corrected by major surgery. Her mother took her to see an orthodontist who used growth guidance techniques (Orthotropics) instead.



Age 12 Age 29

White showing under iris

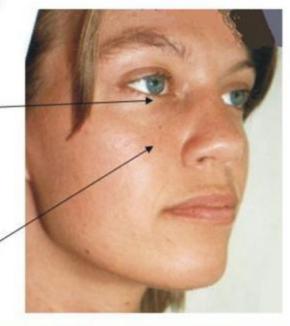
No white

showing

This was the result

Upper jaw back

Upper jaw, Forward





32 teeth with spare space



88

Informed Consent Prior to Facial Surgery!

How important is it?

Her mother was never told that any other form of treatment was available or even existed. Thousands of children in this country are given a similar message every year, and many of them accept surgery believing there is no other way. Many others, probably more than half, refuse surgery and have to live with their deformity.

To be fair, the surgeons sincerely believe that alternative techniques are ineffective and don't tell patients for fear of giving them false hope. For a few surgeons there may also be deeper motives related to professional pride and the threat of cut backs in aesthetic surgery.

WHAT ARE THE FACTS?

INFORMATION ABOUT DIFFERENT METHODS OF TREATING CROOKED TEETH AND JAWS.

Correct growth of the jaws is important for the appearance of both the teeth and face. No one is quite sure why jaws sometimes grow incorrectly but it is probably a mixture of inheritance from your parents and life style factors, such as eating soft food or keeping your mouth open too much. Correction is generally achieved by 'braces' to align the teeth or surgery to correct the position of the jaws.

If the irregularity of the teeth is mild it may be possible to widen your jaw slightly to make room for the teeth. However if it is more severe 'Orthodontic' treatment with 'train tracks' is usually provided, extracting some teeth to make room for the others within the existing size of the jaws. If the jaws are slightly out of position 'Functional Orthopaedics' may be used to move the bones a few millimetres but most orthodontists believe the benefits of this are rather limited. Orthotropics has a high ratio of success as the children can be told "If you don't wear your appliances as instructed, we will have to cut your jaws".



This boy had been told by two different departments that he could only be corrected by cutting his lower jaw into three sections to move it forward.





Age 14

Orthotropics was used to bring both his upper and lower jaw forward



Age 17

Age 11. Age 28



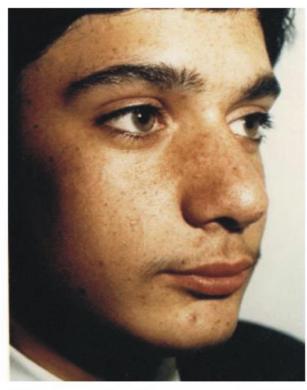


This girl was told she would need surgery when she was older. Instead she was treated with Orthotropics.

She now has all 32 of her teeth in full function. Almost all other types of orthodontic treatment result in the loss of four to eight teeth.







Age 14

teeth.

Age 17

This boy had been told he needed surgery.He was treated with Orthotropics instead. Note how the enlargement of his upper jaw has widened his smile despite the fact that he was born without one of his front











Age 10

Her lower teeth were
14 millimetres behind
her upper teeth. She
was told she would
need surgery to correct
the discrepancy.

She was treated with orthotropics instead.





Age 20

7



This girl had her lower teeth in front of her upper ones. She had been told "you will need an operation to correct the position of your jaws".



Four months later.



She was treated with Orthotropics instead to make her face grow forward.



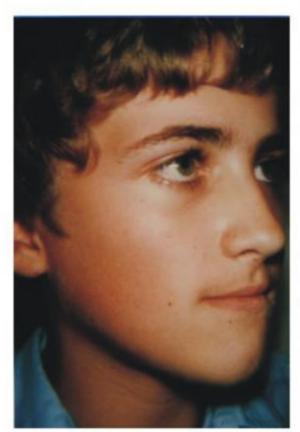
Two years later



This girl was waiting for surgery but by chance heard about someone who could provide orthotropics instead.



Age 14 Nine months later



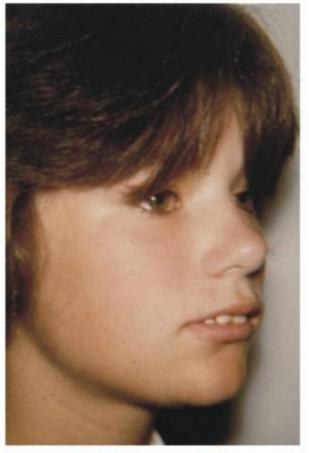
This twelve year old boy had relapsed after previous conventional treatment and was told he could now only be corrected by surgery. This result was achieved after wearing appliances for just over a year. Note again the white under his eye before and after treatment.





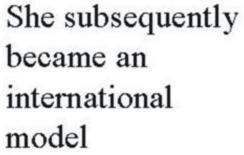






This 14 year old girl was waiting for surgery

Both her jaws were brought forward with appliances.









This boy's lower teeth were 14millimetres behind the uppers.and he was waiting for surgeons to cut and reposition his jaw.







Orthotropic appliances took only three months to correct his jaws.



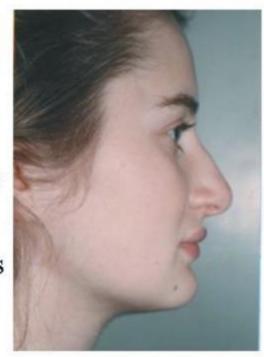






This girl was 17 years and five months old and was due to have her teeth cut from her jaws and repositioned in three weeks time.

It took only nine months for Orthotropics to achieve this correction.









Thank you for your interest, please do what you can to ensure a fair deal for other children with similar problems.

Further information about these methods can be found at www. Orthotropics.com

Supported by:

Charles Hendry MP (Wealden), Patrick Grossmann, BDS, LDS, D.Orth. Richard Dean, MSc, BDS, LDS. John Mew, BDS, LDS, MFGDP, M.Orth.

CAN SURGERY BE AVOIDED WITH ORTHOTROPICS?

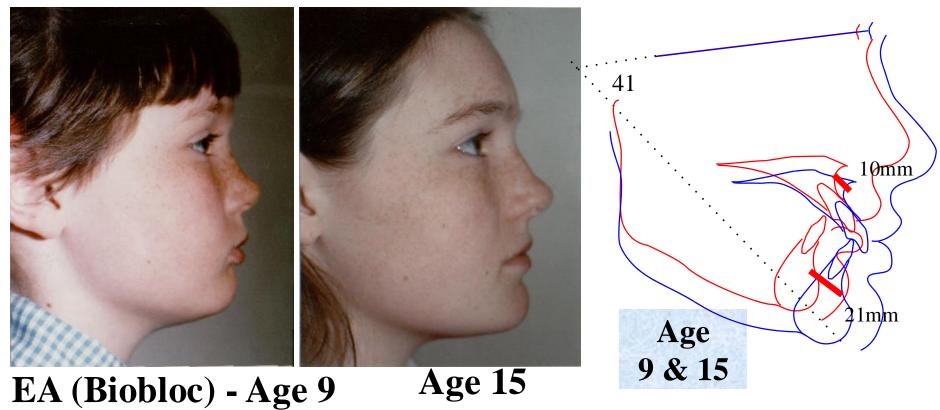
"93% of the public would want to know about any alternative to surgery, even if their Consultant disapproved". (Populous Independent pollster 2012 survey of 1059 parents)

However the GDC have refused to inform British surgeons, or require them to give fully Informed Consent about Orthotropics to their patients.

Research on Growth Direction.

Patients with overjets of 10mm or more were treated by either Fixed Orthodontics or Orthotropics. All the X-rays were traced and measured by the Orthodontist. The chin of the six Orthodontic cases grew at an average growth direction of 74.4 degrees while the Orthotropics cases grew at 50.6°, a difference of nearly 25 degrees. This was enough to classify this small group as clinically 'Highly Significant".

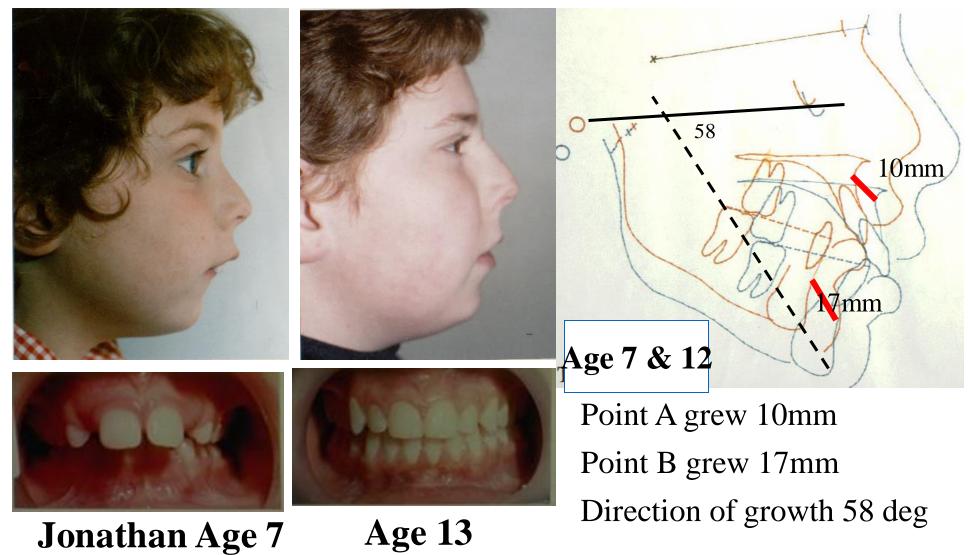
The orthodontists would not permit the faces to be shown, but here are the Orthotropic cases several of whom were 'Unfavourable growers' beforehand.

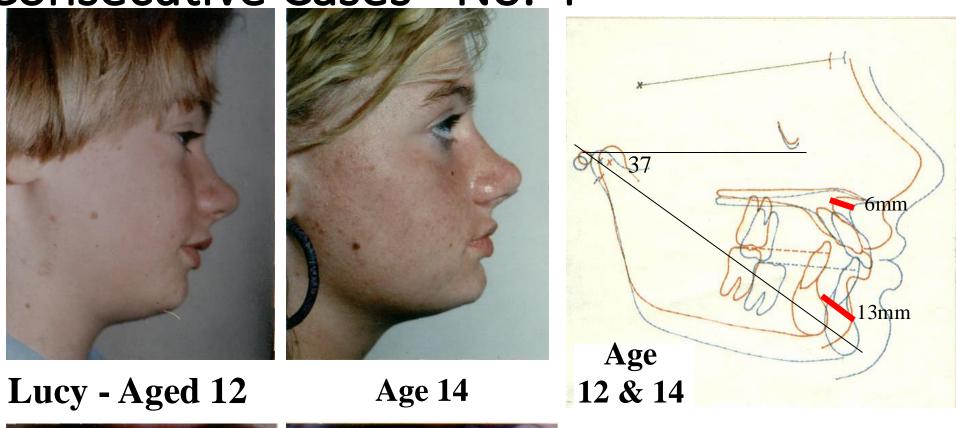






Point A grew 10mm
Point B grew 21mm
Direction of growth 41 deg





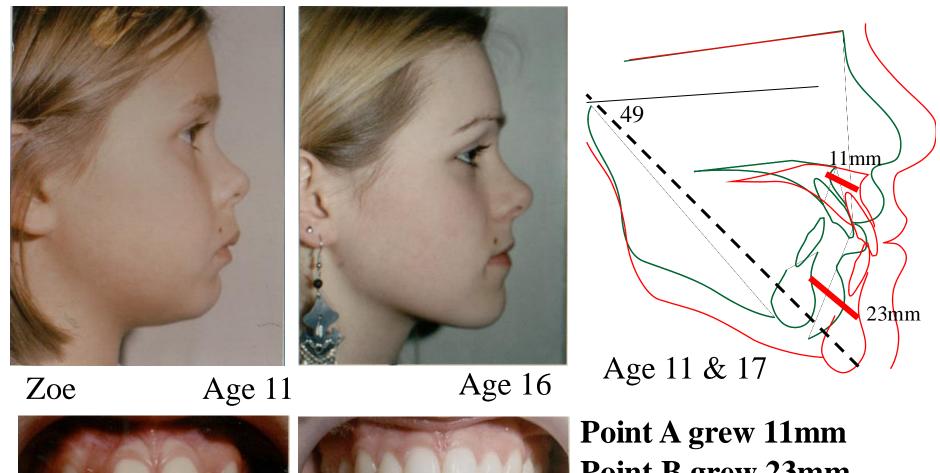




Point A grew 6mm

Point B grew 13mm

Growth direction 37 degrees







Point A grew 11mm
Point B grew 23mm
Growth direction 49 degrees



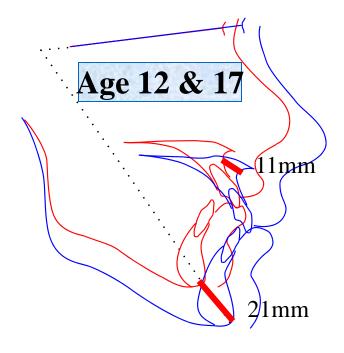
Aged 12





Age 17
After 4 months

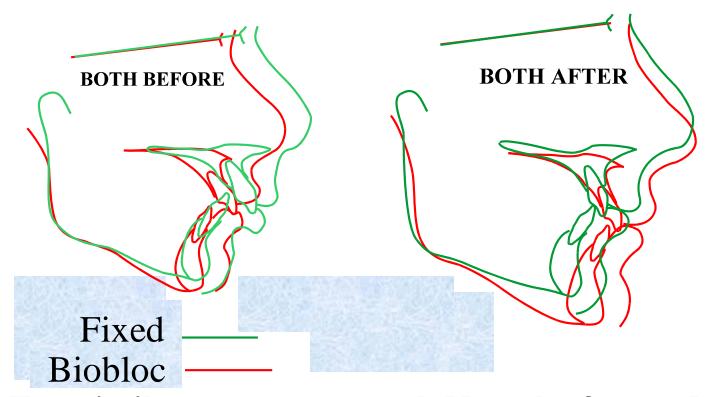




Age 17 Growth direction 55 deg



MATCHED PAIRS



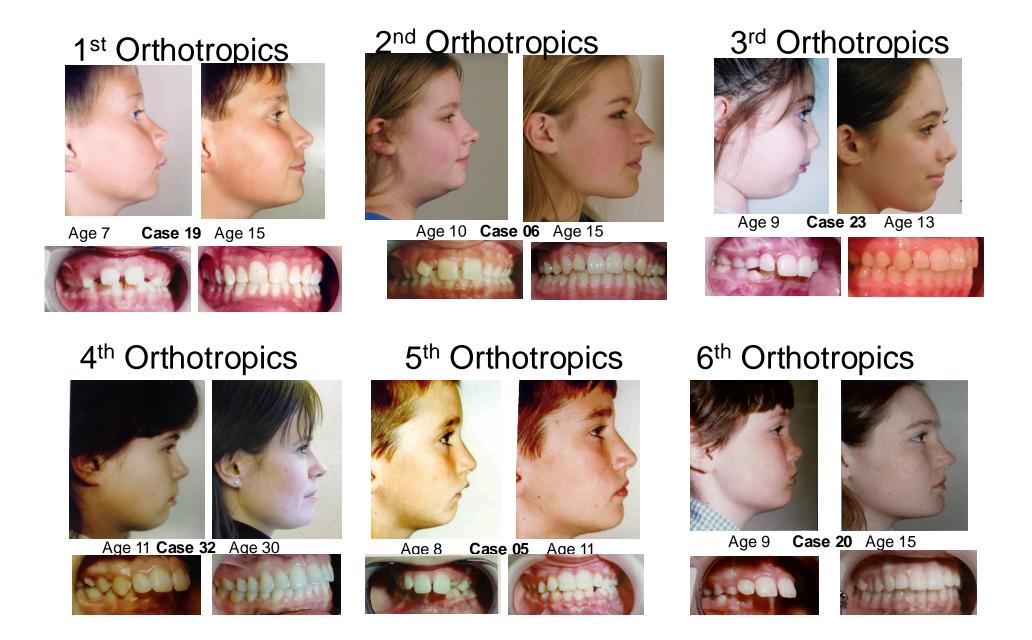
Two similar cases compared. Note the forward movement produced by the Biobloc appliances.

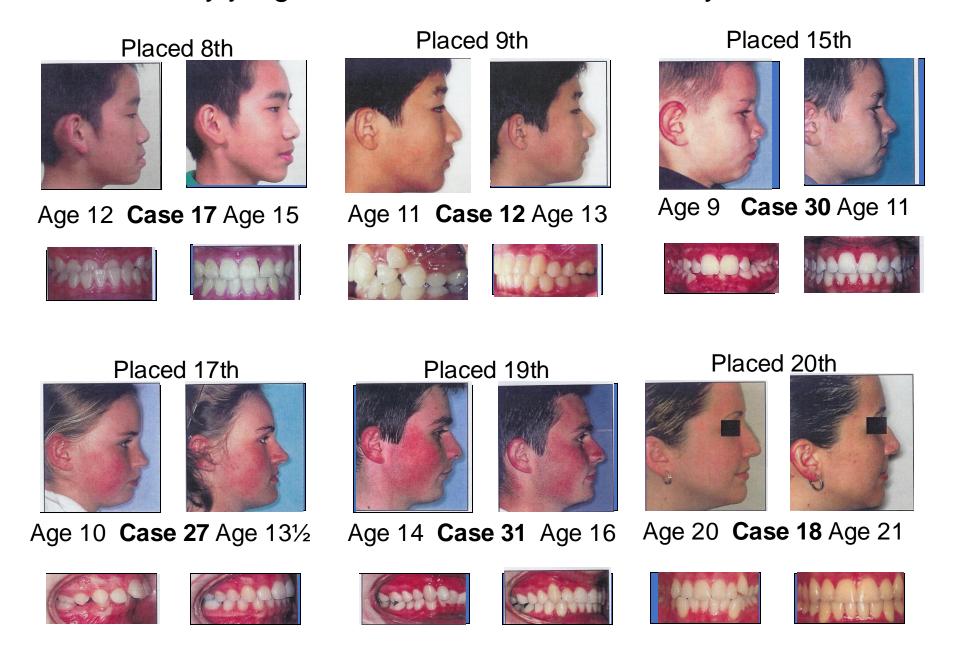
RESERCH

The Aesthetic Contrast Between Excellently Treated Orthodontics and Excellently Treated Orthotropics.

Pictures of the teeth and face of sixteen 'excellently' treated cases published in the Journal of Clinical Orthodontics were compared with sixteen 'excellently' treated Orthotropic cases and then judged by 6 Orthodontists, 6 Dentists and 6 lay university graduates.

All were 'blind' to the method used. The Orthotropic cases were judged to be "Highly Significantly" better than the Orthodontic cases by the dentists and lay people but only "Significantly" better by the Orthodontists.





By kind permission of the Journal of Clinical Orthodontics.

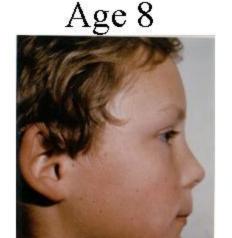
IDENTICAL TWINS TREATED BY DIFFERENT METHODS

Most orthodontists believe that malocclusion is primarily due to genetic variance. I and many others consider it to be largely Environmental. Both groups would accept that comparing Identical Twins is the best way to compare treatments. Six sets of Identical Twins were selected, five prospectively and one retrospectively. One of each pair was treated with orthotropics while the other was treated by orthodontics. When possible the orthodontist selected the twin they preferred to treat. Some twins were not treated and served as controls.

Results were judged by 10 University graduates with no special knowledge in dentistry. All the twins treated by orthodontics were judged as more attractive before treatment but less attractive afterwards, while all but one of the twins treated by orthotropics were judged to look more attractive afterwards.

Ten years later. Little's index of dental crowding, All the orthodontic cases had relapsed to an 'unacceptable' extent accept one case, which was permanently retained. However in all the orthotropic cases, the teeth had remained well aligned.

Identical Twins to compare results



FIXED WITH PREMOLAR EXTS

Ben. Overjet of 8mm, the upper incisors were not retracted Despite this they fell back 5mm.

He is now in fixed retainers













Quinton. Although he had an overjet of 9mm, his maxilla and incisors were taken forward increasing the overjet to 16mm. No fixed appliances, no extractions, no retention and no relapse









Second Pair of Twins











Age 19 Angela

Age40

Aged 19, Angela was not treated and served as a control. Moira had relapsed after previous traditional treatment and her 8mm overjet was retreated with Biobloc.



Age 19 Moira

Age40















Age 11



Age 21

Haley (above) was not treated. Sara (below) was treated with Biobloc for a 4mm open bite.





Age 25















Age 27



Age 12

Davinia (above) had traditional treatment. Carol (below)was treated with Biobloc.



Age 12



Age 27









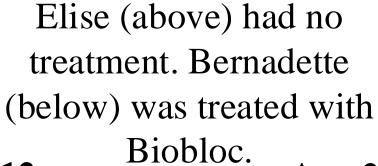




Age 12



Age 27







Age 27













Age 38

Jane (above) had no treatment.
Anne (below) was treated with
the extraction of one second
pre-molar and three second
molars to avoid retracting the
face. Note the buccinator.



Age 12



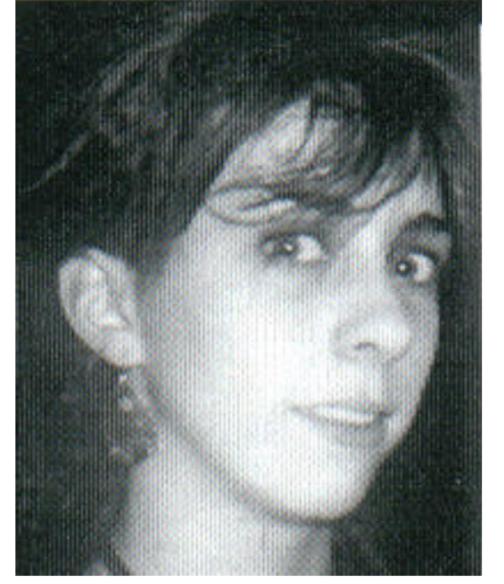


To be fair I wanted to include other methods of orthodontic treatment such as Orthopeadic Orthodontics, Functional Appliances, the Herbst, the Twinblock, the Myobrace, the Frankel all of which claim to improve facial appearance.

However I found few examples of obvious facial improvement, although examples of damage were frequent. Most complaints came from patients who felt their faces had been damaged but no one had warned them.

Orthodontic research shows "Jaws cannot be made to grow". This does appear to be true for cases treated by orthodontics see **slide 110** unless the head is tilted, but orthotropic faces certainly grow forward.





Julia does she look better before or after her orthodontic treatment with premolar extractions.

Mary. Age 12 and age 15 following three years HG and extractions.



Her father was a medical doctor and complained to the British General Dental Council but they said that this was an acceptable Standard of Treatment.









Postural and facial changes following a course of Invisalign.

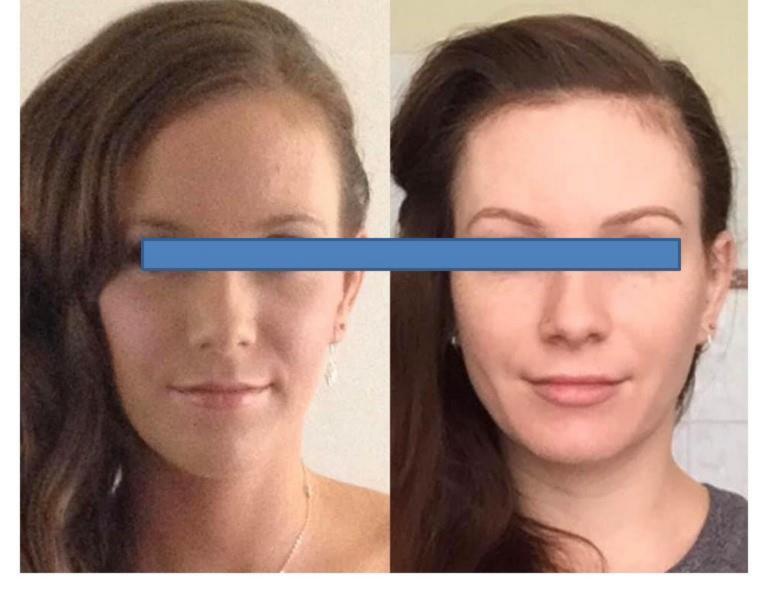
ALIGNERS. Many 122ts and orthodontists currently use aligners. These are very effective at aligning the teeth but the roots are frequently damaged and the teeth lost five or ten years early.

Of more concern Aligners have little control of Pitch, Roll or Yaw and if this occurs only surgery can restore the Occlusion with permanent retention. They also frequently damage the face by lengthening it.

This is the name that has been created by the public to describe the "Tropic Premise" which I created in 1981 and has received nearly ten Billion 'hash Tags' on TikTok.

Many teenagers and young adults have achieved remarkable facial changes and reportedly improved their health, just by training themselves to keep their tongue on their palate and their lips sealed with their teeth in or near contact.

Mewing is also effective at improving sleep problems, which are said to shorten the lives of many overweight citizens by ten years or more.



Affect of correcting tongue to cheek swallow between 28 and 30.



Age 18 18 months mewing edited by Timothy Mclochlan.

Age 23

Facial changes archived with mewing.

BEFORE AND AFTER IMAGES HAVE BEEN LINED UP WITH THE FOREHEAD / BROW RIDGE



Orthodontists are taught that it is not possible to widen the upper jaw after the central suture has closed soon after puberty. However orthotropists believe that the sutures are able to adjust at any age although this happens more slowly the older you get.

It was after I retired that I realised this so I have few examples but there is no reason to believe that sutures close at any point in life. I show a 41 year old.





Problems with Orthodontics.

Root Resorption. This is "an early and frequent iatrogenic consequence of orthodontic treatment" (Kurol 1996). Many research projects have shown root resorption is routine in orthodontic treatment and is thought to shorten the life of the teeth by five to ten years and sometimes much more. To avoid liability most orthodontists warn about this possibility but appear unable to avoid it.

Facial Appearance may be damaged by fixed orthodontic treatment. Most orthodontists deny this but the evidence shows that facial lengthening is routine and longer faces are usually less attractive.



An example of root resorption caused by fixed orthodontic appliances.





91% of British Orthodontists recommended extractions and Headgear for this boy. His looks were rated 5.5 out of ten, before treatment and 4.2 after. An orthotropist would have brought the lower jaw forward

Resorption, Damage and Relapse.

Resorption. This is routine with fixed appliances (train tracks). Researchers like Professor Kurol and many others say it "is an early and frequent iatrogenic consequence of orthodontic treatment" and "93% of teeth showed some root resorption".

Damage. It is thought that fixed appliances shorten the life of the teeth by five to ten years but there has been little to no research to find out the true amount.

Patients who have been treated with fixed appliances need to wear a retainer for the rest of their life, or 90% of them will recrowd (R.M. Little 1988).

Temporo-Mandibular Joint Dysplasia.

This is poorly understood and few clinicians can provide reliable cures. The Prime cause which few people comment on is that both jaws are severely retruded. It is often associated with poor occlusion, irregular contacts and bruxism. Pain can be severe and radiates around the joint.

Raising the bite with a splint may ease pain for a while but after a few weeks, will cause adverse changes in the joint. Grinding the occlusion rarely helps for long.

I believe the best cure is fairly obvious but not easy. 1/ Encourage forward growth while young. 2/ In older patients try to achieve 15mm of forward growth 3/ Both groups must obey the Tropic Premise.



TMD TREATMENT

Passed from specialist to specialist, she had intractable pain for three years. Relief was obtained with a Gelb splint, but returned immedicably it was removed.



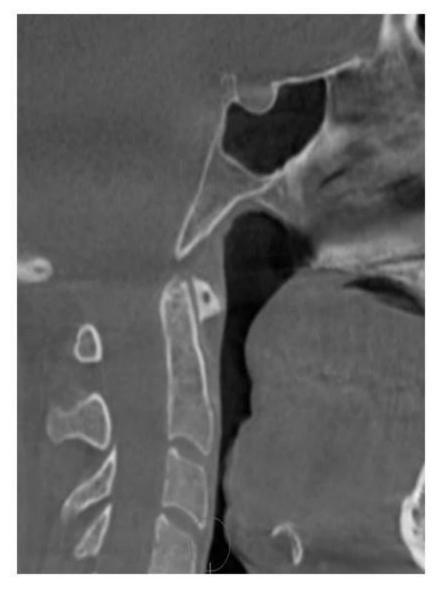
A Biobloc Orthotropic appliance was used to train her mouth closed while the joint remodeled. Despite appearances she weighed 124 lbs before and 116 lbs after. Pain stopped after 3 months of treatment and has not recurred.

Obstructive Sleep Apnoea.

This is due to long-term poor posture. Initially the tongue drops. Then the Maxilla, Mandible and Hyoid drop restricting the airway.

The Hyoid drops further in old age creating a 'double' chin. Then it cannot support the tongue on the palate. More importantly it cannot support the Pharyngeal muscles below. This whole muscle tube then slumps onto the epiglottis and blocks the airway. See picture (next page)

The cure is to lift the Hyoid so the tongue is on the palate. This is difficult because the patient has probably never kept their tongue on the palate. However they were born with this natural reflex and it still exists buried in their subconscious. The Stage 3 Biobloc was designed to teach that although older patients find this hard work. If they succeed, they will be rewarded with several extra years of life.





X-ray showing how back of tongue moves forward when the Hyoid bone lifts up and the tongue contacts the palate.

The Fight to get Expansion Accepted.

At the beginning of the Twentieth Century most orthodontists followed either Dr Angle in America or Dr Chapman in England both of whom expanded the jaws to make room for the teeth, but because they did not train patients to correct their mouth posture the expansion tended to relapse afterwards. In the 1920s Dr Tweed in the USA recommended extracting teeth to make room instead of expanding the jaws.

In 1921 John Mew's father Gordon Mew, also an orthodontist was trained by Dr Chapman to expand the upper jaw at the age of five if there was not enough spare space between the baby front teeth. When John graduated twenty five years later he was told "no one expands now because it always relapses". He researched his father's cases and found that if the patient corrected their posture the expansion did not relapse.

However the National Health Authorities forbad him using expansion and fined him large amounts of money when he did. He asked his professional defence society 'Dental Protection' for help and they obtained an 'opinion' from a barrister who said he had no hope of challenging the NHS so they decided not to help him. He then asked a top QC who said he should win and so he sued the Minister of Health at potentially enormous cost. However he won and the Judge was very condemning of the Minister and awarded Dr Mew large costs. Sadly the orthodontists ignored this judgement.

In 2004 Dr Mew sent records of eleven patients who had been told they had to have surgery to the British GDC. He had treated them all with forward growth but no surgery. The GDC ignored him and in 2014 he condemned them for breaking the laws of informed consent. They obviously did not like this and shortly afterwards accused him of 'Deliberate Dishonesty' for telling a patient that he could improve their face when orthodontists knew this was not possible.

Dental Protection gave Dr Mew permission to defend himself but shortly before the trial, changed their minds and said he would have to be represented by their barrister, probably because they thought he was guilty. This meant Dr Mew was unable to defend himself. They appointed a barrister who refused to accept Dr Mew's instructions and pleaded mitigation. After a trial where the GDC were both judge and jury they removed his licence to practice.

THE LAW.

In the early Twentieth century orthodontic opinions were divided.

Some said the jaws should be expanded to accommodate the teeth.

Others said teeth should be extracted if the jaws were too small.

Because the two sides were irreconcilable the 1921 Dental Act determined that both methods should be taught without prejudice but currently they are not. That is still the British law.