Treatment Approach

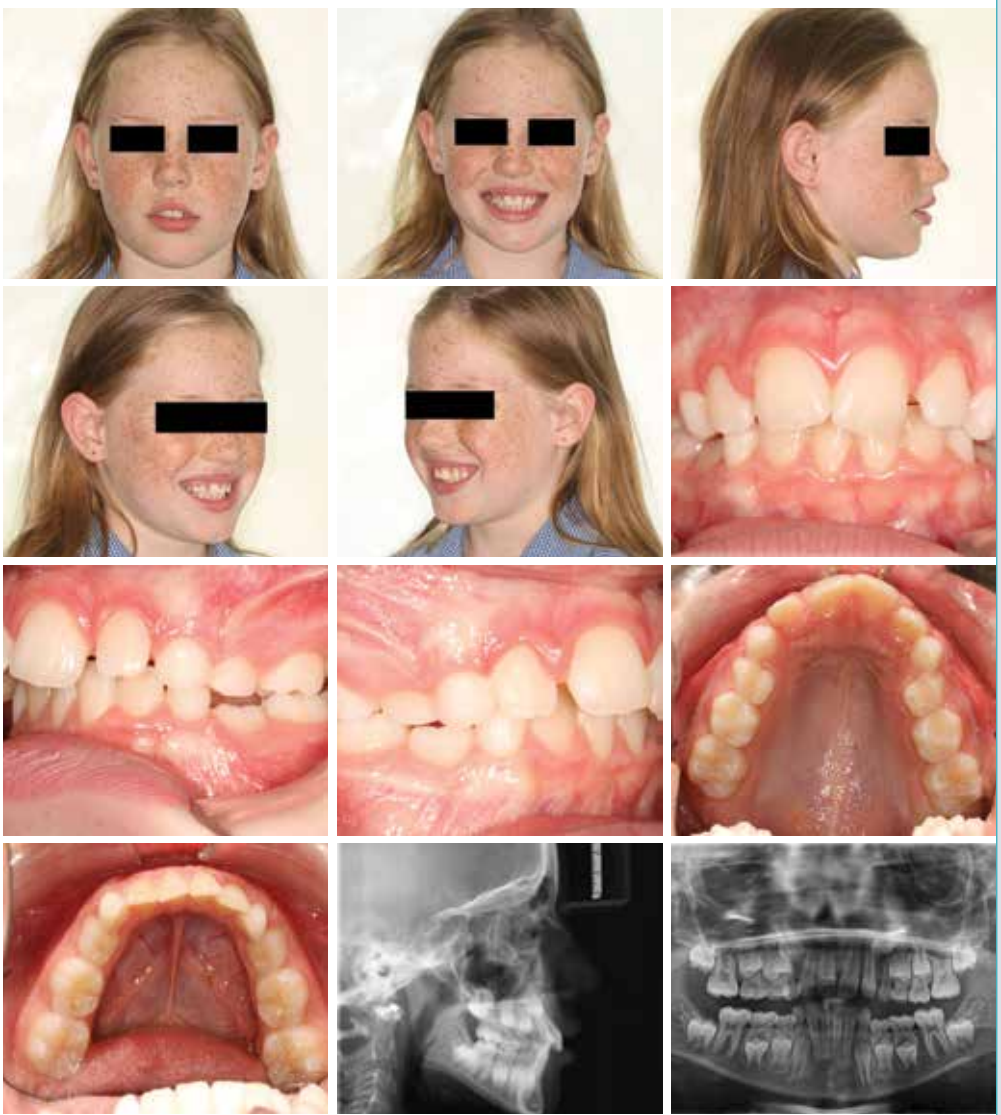
A doc shares a case involving a young girl in the mixed dentition and seeks advice on how to approach treatment.

imv
Member Since: 03/17/08
Post: 1 of 8

Introduction

Mom came with her 9-year-old daughter concerned about her "skew jaw." She presents as a high angle Class II division 1, skeletal Class II. Convex profile with moderate effort to obtain a lip seal. Chin point 5mm to the left of the midfacial plane. Mixed dentition, overjet 8mm, increased overbite. Infraoccluded lower first/second deciduous molars. Lower midline 5mm left of the midfacial plane. Buccal segments Class I right and cusp/cusp left. Maxillary arch constricted left. Tooth UL3 high and ectopic on panorex.

Advice regarding treatment approach most appreciated. ■



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Fenrisúlfr
Member Since: 02/25/09
Post: 2 of 8

The asymmetry might be functional or morphologic. There also seems to be an element of soft tissue asymmetry. Any evidence of a mandibular deviation to the left? At this stage, I would consider extraction of the upper Cs (to facilitate eruption of the 3s) and RME (to alleviate any slide present and to create space anteriorly for alignment of the 3s). ■

3/5/2017

Str8edge
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These are tough to diagnose with pics on the internet because it is difficult to determine the source of the asymmetry. It does not appear to be a significant skeletal asymmetry from the current X-rays, but a PA ceph would really help. Also, she sort of has the "look" of a patient with a lateral functional shift, but doesn't appear to have a unilateral crossbite (could there be multiple biting positions?) The only way to definitively determine if there is a lateral functional shift is clinically (and even sometimes that is tricky.)

From your posted records, it definitely does not appear that she has anywhere close to 8mm of OJ. I would check that measurement again, or retake records if that measurement is correct, but that is an important deciding factor here.

In my opinion, unless you can detect a functional shift from a transverse discrepancy or the OJ is more than it shows in these pics, I would not do any ortho treatment now. Just inform, extract U Cs, UL D and maybe even IPR the mesial of ULE, then observe for likely future comprehensive treatment. ■

3/5/2017

imv
Member Since: 03/17/08
Post: 4 of 8

Apologies forgot to mention no cross bites, CR-CO and no lateral displacements detected on closing. ■

3/5/2017

orthothai
Member Since: 10/14/13
Post: 5 of 8

All the faces are asymmetric, at all the levels (hard and soft tissue.) It is just more marked in some individuals than others.

Concerning the skeletal element which seems to concern you here:

- The mandible is the last part of the face to grow, so asymmetry will increase
- No way to mitigate the final asymmetry as it is related to the length of each branch of the mandible which are genetically determined.

Nothing to do other than wait and see for end of growth here. ■

3/6/2017

dhmjdds
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Post: 6 of 8

She does seem to have some sort of shift, because the occlusion in the anterior photo looks quite different from that shown in the left quad photo. So not exactly sure where her "true" CO might be. I assume you have already talked to them about the likelihood of impaction of UL3. There is a skeletal asymmetry that I can detect on the panorex. For example, look at the space available for the lower 7s. Significantly more on the right than on the left.

As we all know, the only way to completely correct a skeletal asymmetry is surgically. However, I believe you could treat the dental problem with a Herbst appliance and braces. I have found the Herbst the best solution for a significant Class II subdivision problem in patients of the appropriate age. This one is too young at this point. But if the parents are concerned about the chin being exactly centered, then you need to talk surgery. ■

3/6/2017

davidharnick
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Posts: 7 and 8 of 8

OK. We know there is CL2, crowding, narrow arches and PDC UL3. There is a deep bite and a gummy smile. Plenty of options. In my opinion she will need max expansion and there is some research showing an RPE can help. Also, some research showing headgear can help (with PDC).

She has excess OJ. I am keenly aware that many of you find Phase 1 to be inefficient but I think this is a case that begs for it. The lower arch is compensated due to the narrow maxilla. If you don't decompensate the lower molars you will end up under expanding the maxilla by approx. 6mm or you will have a buccal xbite that I am not comfortable with.

So upright the lower molars, RPE, then U2x4 with an intrusion arch using the RPE for anchorage. Then switch to headgear. Use headgear to not only hold expansion but adjust width as needed. Have upper C's extracted, the upper D's will exfoliate soon. Take an X-ray and possibly do open exposure UL3. I would not do this as Phase 1 only. I would call this an extended treatment and estimate 36 months and just charge one fee that covers it all.

As to skeletal asymmetry … condyles look kind of equal. Cover with informed consent. ■

3/6/2017

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