

“Are We Ready to Embrace the Changes in the Field of Orthodontics?”

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What constitutes right in itself may harbour many wrong things. If Shakespeare's world renowned saying "Nothing is either good or bad, but thinking makes it so" is applied to the branch of orthodontics, it literally blends itself very well with how the field of orthodontics is progressing.


In the era of evidence based dentistry everyone seeks for the solution through the published data, for that matter even the clinical reports or the successful clinical outcomes. So what constituted a dogma once is a naked truth now or what was a naked truth then is a mere dogma now. The point which I am going to propose now may seem absurd to many, confusing to some and total scribble to the others. Nonetheless, I would like to make it a point to ponder upon.

- We all grew up with certain ideologies as a post graduate students of orthodontics, to open/create the space between the two teeth, pioneers have advised the use of open coil spring in the higher gauge wire at least the main arch wire should be .016" Stainless steel.¹ Now you can use coil spring in the .016" copper Ni Ti wire.
- Expand the mandibular arch after the growth you will end up in relapsed case.² These days one can expand both the arches even after the growth period has ceased and you don't encounter a relapse unless you have permanent retainer of braided wires. Although we lack the long term studies to claim the same.
- The concept of individual arch form has long gone into the winds.³ Why? Because we are using the copper NiTi wires which don't have the arch form of the averagely seeming human beings.

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Correction of crowding is done by bonding the lower gauge NiTi wire directly to the lingual surface of teeth which seems so unrealistic to believe. Gone with the winds are the concepts of enamel damage, tip, & torque etc.⁴

- Pre-surgical orthodontics followed by the surgical orthodontics and then the post-surgical orthodontics was the standard protocol. But now surgery first is gaining the speed to beat the earlier concept. So, where is the concept of exaggerate the malocclusion, decompensate the dental compensation etc.? However, meticulous case selection which is clearly indicated for the surgery fist approach can reduce the treatment time drastically.⁵
- High anchorage case -use the head gears; with the advent of implants each and every case turns out to be an absolute anchorage case and the results of course are excellent. This of course is an advantage which was needed for the benefit of the patients who were non-compliant and it avoids the inconvenience of using the extra oral appliance.⁶
- Where were we wrong then? In diagnosing the case or in not considering the growth changes; both negative as well as the positive growth or treatment mechanics. The answer is a difficult one and the solution is simple, shouldn't one use the absolute anchorage for the absolutely necessary cases?
- Crowded cases with the requirement of individual canine retraction-use Mulligan's bypass arch wire to retract the canine, now we can do the same using lace backs. But, are the results same? According to a published study mulligan arch produced more controlled canine movement than the active lace backs.⁷
- In the zeal of doing something new, the biomechanics and the physiology should not be ignored. Mere production of the results should not matter more than the means how they are produced. Good example is the treatment of class II div 2 malocclusion; it can be treated using the simple NiTi wire or by the utility arch wire or by using an implant supported arch wire. All the three are equally capable of producing the results but which one is most beneficial? ⁸
- Class I Molar and Canine relationship was must. Now, class II molar and class III molar relationships are fine.
- The Management graduate student proposed clear aligners and are gaining popularity. Earlier the same clear positioners were used as retention appliances. Agreed the material availability must have played the role in the raise of popularity of the clear aligners. Both aligners and pre adjusted appliances are equally good in correcting the malocclusion, however, when it comes to torque control and the occlusal contact establishment, pre adjusted edgewise appliance score better.⁹
- For that matter lingual orthodontics was practiced in selected cases. But the present concept not supports this dogma of limitation in the case selection for the lingual orthodontics.¹⁰
- The concept of envelope of discrepancy which was religiously taught in every institution is ever changing with every new invention in orthodontics. Orthodontic treatment using bone screw has added new dimension to the envelope of discrepancy. Now surgical orthodontic cases can be handled pretty well using the bone screws.¹¹
- The irony faced by everyone in teaching profession is what to teach the Post graduate student. Should we teach him/her the existing ever changing, two faced, instant based orthodontics or the orthodontics which has withstood the testing of time and has proven its worth in the long run.
- The enigma of social six for the earlier generation is rather an unsolvable puzzle. For them the complete strap up followed by the mutually protected occlusion is the kudos performance. If social six is a valid thing in the lingual orthodontic system, why can't it be same for the buccal appliance?¹²
- If the result oriented conclusions are the ones which make the impression, then the vigorously opposed veneering of the maloccluded teeth should be praised for producing the same results with in no time.

With so much so to the evidence based dentistry, what we are witnessing right now is the decline in the quality of publication.¹³ With the compulsion of article publication people are coming up with the scrap data which neither possess validity or the reliability. And such publication if taken into account for evidence based dentistry, one can imagine the quality of evidence we possess. Because there are handful of people who are really interested in such kind of exclusive academic activity.

- Researches which are going on in the post graduate institution are the mere replication of the previously published research, thus giving way to the “cut and paste or copy and paste” culture and most of the people don't even have objection for that.¹⁴ If this is continued how are we going to sow the seed of inquisitiveness in the minds of these budding orthodontists?
- Research methodology is a topic which is must for the post graduate students. It is necessary to build the enthusiasm in the upcoming generation to give due importance to this topic for the better scientific research.
- Does all this, ring the bell in once mind? If not, it is high time and the wakeup call has to be given for each orthodontist to decide where they want to head. Obviously we have forked road, the one which is most travelled and worn out and the other which is least travelled and least explored. Like the famous poet Robert Frost, one can choose the path which is least travelled and make all the possible difference.
- our own Bachelor dental surgeons practicing the orthodontics, the other group of orthodontist who have successfully completed their private orthodontic training, the group of the orthodontist who hold the certified course from the foreign delegates visiting India, learned orthodontist coming from Russia, orthodontic diploma holders and we the master degree holders in the branch of orthodontia all have to share this burden of the changing tide to come out victoriously with what seems right at this point of time.

So where are we? Are we there at the verge of the sinking of the basic ideologies or the physiology or at the dawn of the era of the ideologies which need the support of the older generation and the embrace of the new generation, most of all the “time”; If the new tide of ideologies and the philosophy's can withstand the rough storms of the time, then they are here to stay.

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