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The journal aims to publish high-quality peer-reviewed articles pertaining to areas of original research, case series, case reports, clinical innovations, practice management tips, book reviews and reviews on all aspects of orthodontics. Research in the fields of craniofacial genetics, molecular biology, epidemiology and oral health as related to the field of orthodontics is encouraged.

The journal promotes meta-analysis based systematic reviews and randomized clinical trials with an aim to promote evidence based reports.

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The life of an orthodontist revolves around brackets, bands and wires…..the rest he/she is supposed to have is already mastered prior to attaining the coveted degree. The problem with this point of view is that it is only true for a small percentage. The orthodontic program does give the basic training regarding the concepts, however, the financial aspects of the inventory remains untouched.

This issue is primarily devoted to finding out the reality of what is in use in our orthodontic offices. The cutting edge research questions the claims of many manufacturers and, therefore, opens newer horizons for the use of latest products coming in from not so well known manufacturers. I sincerely hope that the presented articles give us a direction toward making our practices more patient friendly. The quality of treatment rendered keeps the patients in our practices and we, as professionals, need not just have to upgrade ourselves to diagnose better but to understand the quality of products being used by us on a daily basis.

The clinical innovation section has become the most popular part of the JIOS. The articles being featured in this section have been incorporated by many of us in our own practices. Some of them are being republished in other journals and we are proud of our contributors for the mileage that the JIOS earns because they decided to share their knowledge on this forum.

The JIOS website, www.jios.net, has been upgraded and article submission has been made simpler. Also, back issues have been put up thereby making the search of previously published articles easier, thus keeping with our aim of making the JIOS truly International. The articles, since 2006, are now available and accessible to all IOS members.

The forthcoming 8th APOC and the 47th IOC, to be held in New Delhi, would involve the largest gathering of renowned International speakers, some of them visiting India for the first time. There will be over 50 foreign speakers who would be covering all the aspects of orthodontics in their presentations. To add to this, a variety of preconference and postconference courses will take place, which will surely enhance the clinical acumen of the delegates.

Looking forward to more education…..and ‘bonding’.

Yours’ sincerely
Gurkeerat Singh
Editor, JIOS
Letters to Editor

Sagar S Padmawar, Anup Belludi, PG Makhija, Amit Bhardwaj, Bhavna Virang

I read with great interest the ‘Original Study’ on the above topic by SS Padmawar et al in JIOS, April-June 2012, Vol. 46, No. 2. Some observations are noted as follows:

1. In the abstract, stresses are higher with bilateral implants contradicts with bilateral implants generate less stresses in the next line.

2. The study is on ‘\textit{En masse} absolute intrusion of maxillary anterior’. However, with a continuous archwire ‘absolute intrusion’ cannot be studied as reciprocal effects will be extended onto the posterior segments. There is no specification regarding archwire in the material and methods.

3. I disagree with conclusion ‘stresses on teeth are less’ with bilateral force of application. In intrusion owing to small surface area at apex, force levels generate more stress. Therefore, the need to limit force levels applied is essential to be within optimum limits (15-20 gm).

Stress will only be more, if more than optimum force is applied. For intrusion, optimum force levels will change depending on the trajectories of force application.

Considering optimum intrusive force of 20 gm each for incisors and 30 gm for canines; following force level (F) are required to be put.

\textbf{Mid Implants (Single)}

\begin{equation}
F \sin 45^\circ = 70 \text{ gm} \\
\therefore F = 120 \text{ gm}
\end{equation}

Each side application is = 120 gm.

\textbf{Bilateral Implants (Two)}

\begin{equation}
(70 \text{ gm}) F \\
\begin{array}{c}
3 \\
2 \\
1 \\
\end{array} \\
\begin{array}{c}
\bullet \\
\bullet \\
\end{array} \\
\begin{array}{c}
1 \\
2 \\
3 \\
\end{array} \\
\begin{array}{c}
F (70 \text{ gm}) \\
\end{array}
\end{equation}

‘F’ is the force which the clinician should measure and apply (unilaterally/bilaterally).

Although the conclusion that ‘bilateral implants are a much better choice for true intrusion’ is correct, force levels if applied judiciously with logic will create optimum stress irrespective of number of implants.

Above is my personal view and in no way undermines the extensive study.

\textbf{Rajiv Ahluwalia}
Professor and Head, Santosh Dental College
Ghaziabad, Uttar Pradesh, India
Author’s Response

We are thankful to the reader for showing interest and expressing his views on the article ‘Stress Appraisal with Simulation of en masse Absolute Intrusion of Maxillary Anteriors deploying Strategic Mini-implant Locations: A Finite Element Analysis’, our observations to his views are as follows:
1. First line in the abstract is regarding to the ‘teeth’. The stresses are higher on the teeth with bilateral implants. The next line in the abstract is regarding the stresses generated in ‘hard bone’ which are less as compared to the single implant group.
2. In the article, the picture showing the wire segment is not clear, but we have used segmented archwire. The eyelets on the segmented archwire distal to the canines and mesial to the second premolar are seen, hence, there were no reciprocal forces exerted and stresses generated on the posterior teeth.
3. Application of 2D trigonometry mathematical formulas for living 3D biological entities, like the teeth and their environment, including PDL, bone, cellular and extracellular environment, may not yield the proper components of forces or understanding to desired tooth movement in 2D, hence, the attempt to simulate 3D environment with better mathematical models like FEM are used for research based on CT/CBCT scan of individual patient. Even then these FEM models have variety of limitations very well documented in literature which are to be kept in mind plus the biological variations, shape of archwire, friction, angle of application from wire to implant, periodontal condition, center of resistance, etc and of course we agree with the remark of reader ‘force levels if applied judiciously with logic will create optimum stress irrespective of number of implants’ and conclude that ‘bilateral implants are a much better choice for true intrusion due to more balanced distribution of stresses’.

Application of 2D Concepts to 3D Geometry or to Multidimensional Biological Entities may produce Erroneous Results and this may be further Clear from following Pictures

Given the coordinates of any two points along the line of action of the force (in reference to the figure shown, one of the points is the origin):
Let \( d = \text{distance OB} \)
\[
\begin{align*}
F_x &= F(x/d) \\
F_y &= F(y/d) \\
F_z &= F(z/d)
\end{align*}
\]

Archwire is not straight as is drawn usually in 2D and 3D vectors
The inclination of the chain from midline to implant may look perpendicular but is not so in sagittal direction
Depth angle varies on point of attachment

Regards

Sagar S Padmawar, Anup Belludi
PG Makhija, Amit Bhardwaj, Bhavna Virang
Some Pertinent Observations

We read with interest Doshi et al recent article on successful nonsurgical resolution of skeletal open bite using implant-supported bite blocks [Doshi UH, Bhad WA. Implant-supported bite blocks for open bite correction in adults. J Ind Orthod Soc 2012;46(2):86-92]. The authors are to be commended on the final treatment results achieved and presented in the 21-year-old. The removable appliance they used in conjunction with bilaterally placed zygomatic implants was indeed very innovative. However, we could not help noticing a couple of intriguing observations (in the article) that we felt were major concerns to which we would now like to draw attention.

First and foremost, Figures 6C and 7B do not appear to be treatment photographs of the same patient. If one were to compare Figure 7B with pretreatment intraoral pictures (Figs 1A to C); one could readily discern the following:

1. Individual characteristics of the incisal edges of the upper incisors in Figures 1A and 7B are perceivably different.
2. The increased mesiodistal width of the upper incisors in Figure 1A/7A appears decreased by a considerable degree in the post-treatment retention Figure 7B.
3. The gingival contours of the upper incisors (especially laterals) validate the observation that the two photographs may not reflect that of the same patient. If indeed a gingival recontouring was carried out, the authors fail to mention it in the text.
4. Another contentious feature (that is a giveaway) is the upper left canine tip that is rounded due to considerable wear in Figure 1C. But, in the retention photograph (Fig. 7B), the tips of the upper cuspids show no evidence of wear (has very sharp tips).
5. The post-treatment cephalogram validates the claim by the authors that they obtained 2 mm of overbite; but, the final photograph (Fig. 7B) displays at least more than 3 mm of vertical incisor overlap (this was deduced from comparing the amount of incisor coverage between Figures 1A and 7B).

In order to confirm our suspicions, we had the photographs sent to our Photography Department in University Brunei Darussalam where they were ‘superimposed at various magnifications’. Sadly, they returned it to us with a ‘100% mismatch’ result. While our observations do not intend to detract the fact that this case was indeed treated successfully (as validated by the post-treatment cephalogram); nevertheless, we would like to construe this as a case of ‘probable oversight’ on part of the authors during compilation of the article. With due respect, we would like the authors to consider a clarification of our observations.

Uday Kumar Umesan
Co-Head of Orthodontic Services
Brunei Darussalam

Chua Kui Lay
Co-Head of Orthodontic Services
Brunei Darussalam

Author’s Response

Clarifications on letter to editor on article ‘Doshi UH, Bhad WA. Implant-supported bite blocks for open-bite correction in adults. J Ind Orthod Soc 2012;46(2):86-92’. We thank the readers for their interest and appreciation of our results.

We would like to clarify some of the questions raised regarding perceived differences in photographs.

We would like to take this opportunity to add some of the points which were not mentioned in the text and which defiantly will clarify most of the doubts.

First of all, the purpose of the article was to present a modified intrusion technique with long-term stability. In doing so, some points regarding fixed mecanotherapy were omitted from the text. We are adding those points for clarification of readers.

In this particular patient after completion of intrusion, for minor retraction of upper anteriors minimal proximal stripping was done to create required spaces. Hence, the mesiodistal width of incisors appears to be different in pre- and post-treatment photographs.

During same appointment, some esthetic recontouring of incisal and cuspid tips was also done. With regards to increased overbite, we would like to draw attention toward caption of Figures 7B and 8A. Figure 7B is after retention using passive blocks, which further deepened the bite by 1.5 mm. Hence, after complete retention phase, the bite was of 3.5 mm as opposed to 2 mm as mentioned in article text. Lastly, we again would like to thank the readers for giving us the opportunity to clarify some of the important observations which were not included in the original text.

Regards

Umal H Doshi, Wasundhara A Bhad
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