

Letters From Our Readers

To: Editor, *The Angle Orthodontist*

Re: A comparative study between currently used methods and Small Volume Cone Beam Tomography for surgical placement of mini implants. Melissa Landin, Aniket Jadhav, Sumit Yadav, Aditya Tadinada. *The Angle Orthodontist*. 2015;85:446–453.

We would like to thank the authors for reporting results of their study in which they compared various methods with Small Volume CBCT for surgical placement of mini implants. In the paper, there were two questions that arose regarding the methodology described. As suggested by Poggio et al.¹ and Deguchi et al.,² the recommended dimensions of mini implants to be placed in interradicular areas is 1.2–1.5 mm in diameter and approximately 6–8 mm in length. However, we did not find any mention about the diameter of mini-implants used in this study. Larger diameter mini-implants could have a greater chance of making contact with adjacent roots.

Another question which we would like the authors to answer is how they used the information from CBCT images of the interradicular area to determine clinically the site of mini-implant placement. It was mentioned in the methods that the potential site for mini-implant placement was determined on axial view of the CBCT acquired image but how was this information used to place the mini implant at the predetermined site? In the literature, either 3D guides or SLA models have been

used for placement of mini-implants using CBCT.^{3–5} Alternately, a reference landmark such as an orthodontic archwire has been used to determine clinically the potential site as determined on CBCT images.⁶

We would appreciate if the authors could share their views.

Shilpa Kalra, Tulika Tripathi

*Maulana Azad Institute of Dental Sciences,
New Delhi, India*

REFERENCES

1. Poggio PM, Incorvati C, Velo S, Carano A. “Safe zones”: a guide for miniscrew positioning in the maxillary and mandibular arch. *Angle Orthod*. 2006;76:191–197.
2. Deguchi T, Nasu M, Murakami K, Yabuuchi T, Kamioka H, Takano-Yamamoto T. Quantitative evaluation of cortical bone thickness with computed tomographic scanning for orthodontic implants. *Am J Orthod Dentofacial Orthop*. 2006;129:721:e7–12.
3. Kim SH, Choi YS, Hwang EH, Chung KR, Kook YA, Nelson G. Surgical positioning of orthodontic mini-implants with guides fabricated on models replicated with cone-beam computed tomography. *Am J Orthod Dentofacial Orthop*. 2007;131(4):S82–89.
4. Morea C, Dominguez GC, Wuo Ado V, Tortamano A. Surgical guide for optimal positioning of mini-implants. *J Clin Orthod*. 2005;39:317–321.
5. Kim SH, Kang JM, Choi B, Nelson G. Clinical application of a stereolithographic surgical guide for simple positioning of orthodontic mini-implants. *World J Orthod*. 2008;9:371–382.
6. Kalra S, Tripathi T, Rai P, Kanase A. Evaluation of orthodontic mini-implant placement: A CBCT study. *Prog Orthod*. 2014;15:61.