

because the mesiodistal positions of the maxillary left and right molars were different. Therefore, the amounts of mandibular setback in the 2-jaw surgery were 3.0 mm on the right side and 7.0 mm on the left side.

The main point of this case report was to introduce the approach for the maxilla. Therefore, we omitted some descriptions of facial asymmetry. Before treatment, the posteroanterior cephalometric analysis showed that the mandibular deviation toward the right was approximately 8.0 mm at the mental spine. In the posttreatment posteroanterior cephalometric analysis, the mandibular deviation was changed to 4.0 mm. Although the mandibular deviation was not eliminated perfectly, we think that there was an improvement.

*Satoshi Kokai
Eiji Fukuyama
Yutaka Sato
Jui-Chin Heu
Yuzo Takahashi
Kiyoshi Harada
Takashi Ono
Tokyo, Japan*

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Treatment effects evaluated with cone-beam computed tomography

I read with interest the study of Kook et al, and my compliments to the authors for their efforts (Kook YA, Bayome M, Trang VT, Kim HJ, Park JH, Kim KB, et al. Treatment effects of a modified palatal anchorage plate for distalization evaluated with cone-beam computed tomography. *Am J Orthod Dentofacial Orthop* 2014;146:47-54).

I appreciated the clinical aspect of the valuable research; however, I think that the title of the study is misleading the readers, since the formulation "evaluated with cone-beam computed tomography" implies using 3-dimensional (3D) measurement tools. Nevertheless, linear and angular measurements were performed on the lateral cephalograms derived from CBCT data sets. A lateral cephalogram derived from CBCT might not be considered as a tomographic record, since "tomography" implies third dimension.

CBCT-synthesized cephalograms are commonly used in the literature. On the other hand, in 2008, Periago et al¹ published a study showing that many linear measurements made on CBCT-derived images are significantly different from the real anatomic dimensions;

however, most can be considered to be sufficiently clinically accurate.

In another study, Hassan et al² demonstrated that the measurements based on virtual cephalograms for some measurements deviated from the gold standard by more than 1 mm, and the authors suggested that performing cephalometric analysis on 3D-rendered models—not on derived cephalograms—seems to be the most appropriate approach.

In a recent study, Pittayapat et al³ mentioned that the linear distances can be defined as direct distances on 3D models, not orthogonal distances or distances created by projecting a 3D structure on a plane, which is the principle of 2-dimensional (2D) lateral cephalography. They demonstrated that 3D linear measurements are more accurate and reliable when compared with the digital lateral cephalometric measurements.

In the light of these articles, I wish the authors had used specific 3D analysis software for evaluating the valuable data. The precise images that we obtain from CBCT justify the fee and the exposed radiation dose, but the transformation of 3D data to 2D data is like "going 2 steps forward and going 1 step back."

Berza Sen Yilmaz

Istanbul, Turkey

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Author's response

We thank Dr Sen Yilmaz for his interest in our article.

We said "cone-beam computed tomography" in the title because that is what we used to make the measurements. There was no way other than the use of CBCT to create a lateral cephalogram for each side of the head independently. This step increased the accuracy, since