

Anchorage consideration in the clear aligner

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Orthodontic treatment using clear aligners, including invisalign, is different from traditional orthodontic treatment using brackets and wires. If you attach the bracket to the teeth and engage the archwire, all of the teeth are forced at the same time, and each movement of the teeth occurs. However, the movement of the teeth using the clear aligner can be planned separately according to the intention of the operator. The movement of target teeth occurs at each stage, while the anchor teeth functions as a fixed anchorage without movement. Therefore, the orthodontic treatment can be performed by creating new types of movements such as sequential distalization and intrusion of specific parts just by wearing the aligner.

However, we are experiencing that the results of tooth movement do not appear just as the shape of the aligner was made. Several factors, such as biomechanical elements, anatomical limitations, force action and reaction, act in combination in the process where the aligner transmits force to the teeth and results in tooth movement. As a result, the three-dimensional arrangement of teeth designed on the monitor is not reproduced as it is in the actual patient dentition.

It is necessary to recognize the difference between these plans and the actuality, and use the aligner to create the treatment that the operator wants. Through this lecture, we would like to find out how to evaluate and reinforce the anchorage in the planning and progress of clear aligner treatment with various cases.

Profile

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