All-on-4 and Tilting of Implants

All-on-4 was developed to provide edentulous patients with a fast, cost-effective fixed restoration using only 4 implants to support a full-arch prosthesis. Two of these implants are tilted posteriorly. An acrylic prosthesis is immediately loaded on the four implants.

When used in the mandible, tilting of the posterior implants makes it possible to use longer implants and, thereby, achieve good bone anchorage without interfering with the mental foramina. In severely resorbed maxillae the tilted implants are an alternative to sinus floor augmentation. Tilting of the posterior implants results in a better spread of the implants along the alveolar crest which is beneficial for the load distribution and allows the final prostheses to hold as many as 12 teeth with only short cantilevers.

Published data on the All-on-4 concept shows cumulative survival rates between 92.2 and 100%\(^1\)\textsuperscript{-5}. Tilting of implants has been applied in clinical practice for over a decade and shows good results\(^5\)\textsuperscript{-16}. Biomechanical measurements show that tilted implants, when part of a prosthetic support, do not have a negative effect on the load distribution\(^8\).

References


