Anatomical study of the Zygomatic Bone for the placement of Zygomatic Implants in totally Edentulous patients using Cone Beam Computed Tomography

The 3D computer-assisted technologies are the new trend of the last years in major surgeries as Maxillo-facial surgery for diagnostic imaging and surgery. It finds a large employment especially in complex clinical cases as the zygomatic implants where the evaluation of the bone available and the planning of the fixture trajectory results difficult with standard diagnostic imaging. This study is aimed to evaluate the amount of malar bone available in length on the possible ideal zygomatic implant trajectory. The ideal oblique slices, that simulated the different trajectories of the zygomatic implants (anterior and posterior) on the sagittal plane and that respected well defined and favorable occlusal parameters for the quad approach were obtained from 100 Computer Tomography of the facial mass of totally edentulous patients. For each oblique sagittal plane identified, three different implant trajectories were hypothesized on the frontal plane. Finally, the length of engaged malar bone, the intrasinus and the extrasinusal paths were measured for each implant trajectory. The research outcomes and the clinical implications will be presented.

Biography
Professor Paolo Pisi graduated in Medicine and Surgery (110/110 cum laude) in 1980. He became Specialist in Radiology (70/70 cum laude) in 1984, Academic Researcher at 27 years old. From 2008 he is managing director of the diagnostic imaging service of Hesperia Hospital in Modena. From October 2012 he is Academic Professor of the Department of Biomedical and Neuromotor Sciences at the University of Bologna and managing director of the Department of Dental Radiology Service.

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