

SHORTENED DENTAL ARCH IN IMPLANT-PROSTHETIC REHABILITATION IN HEALTH COMPROMISED PATIENT

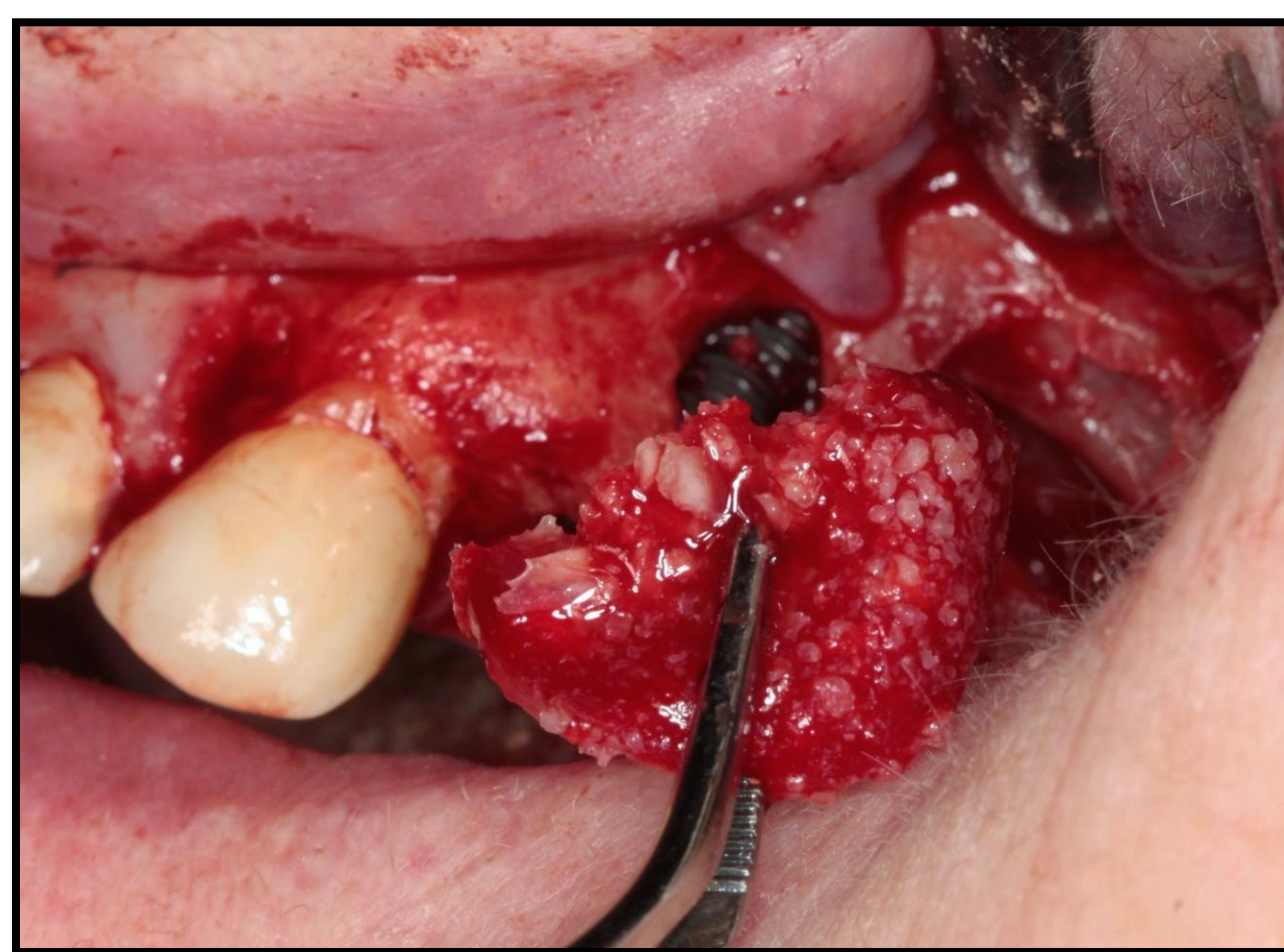
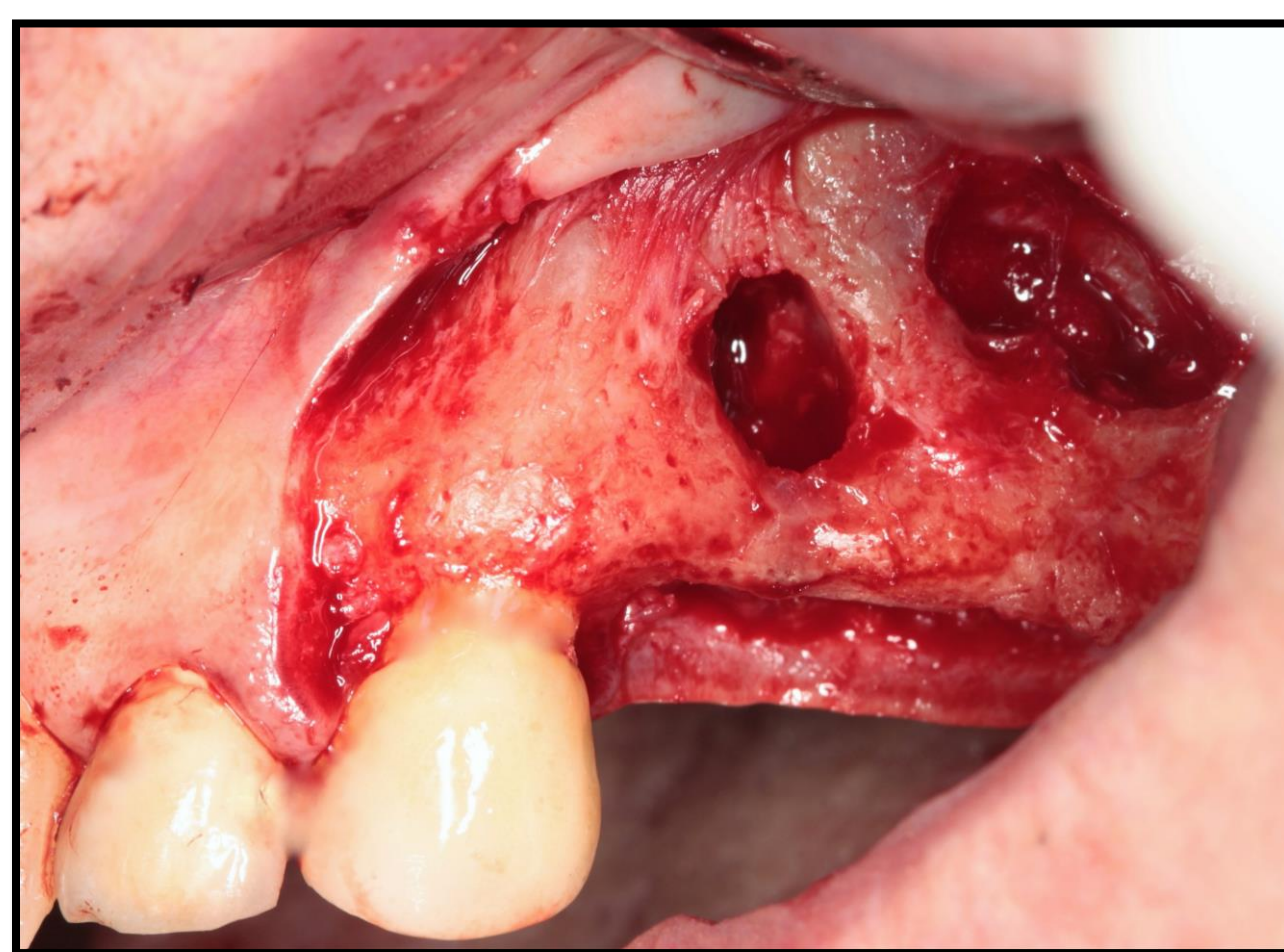
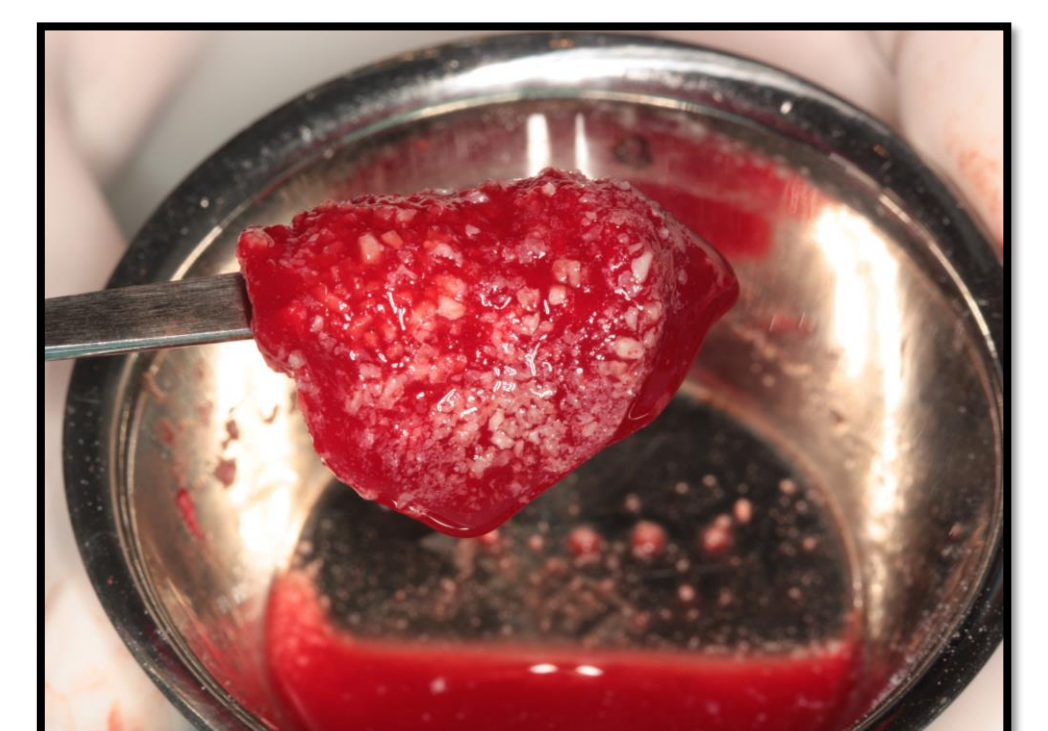
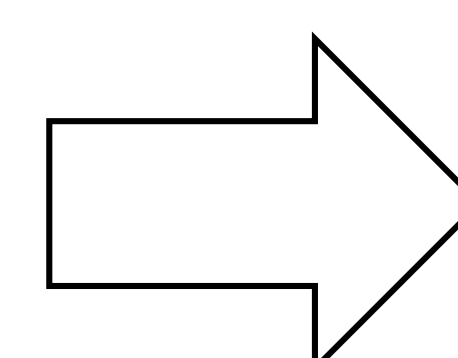
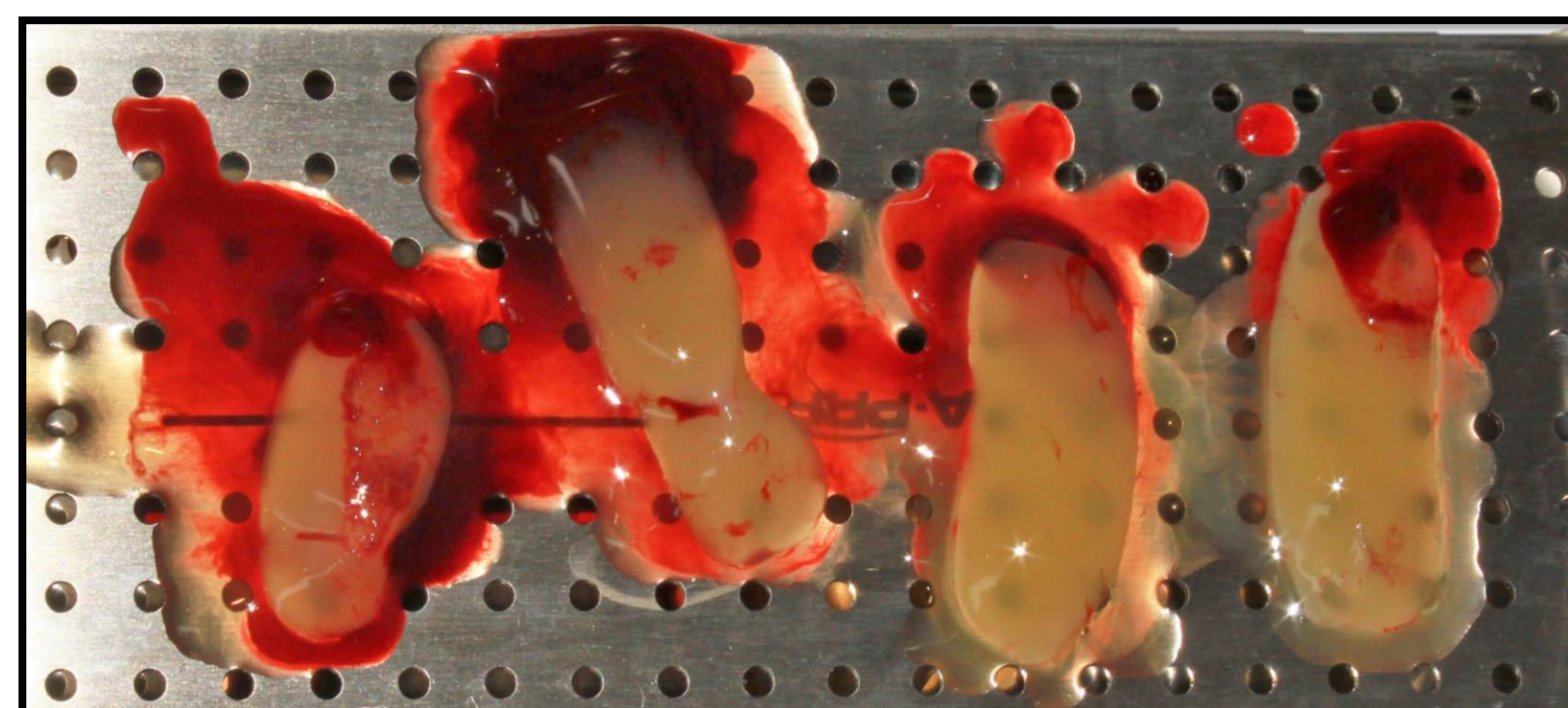
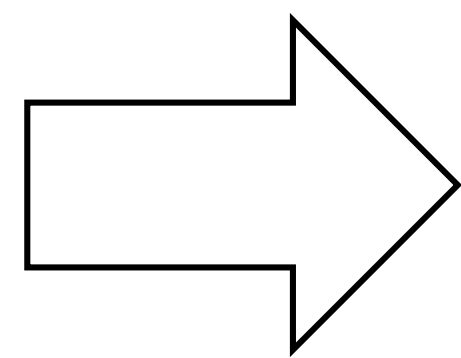
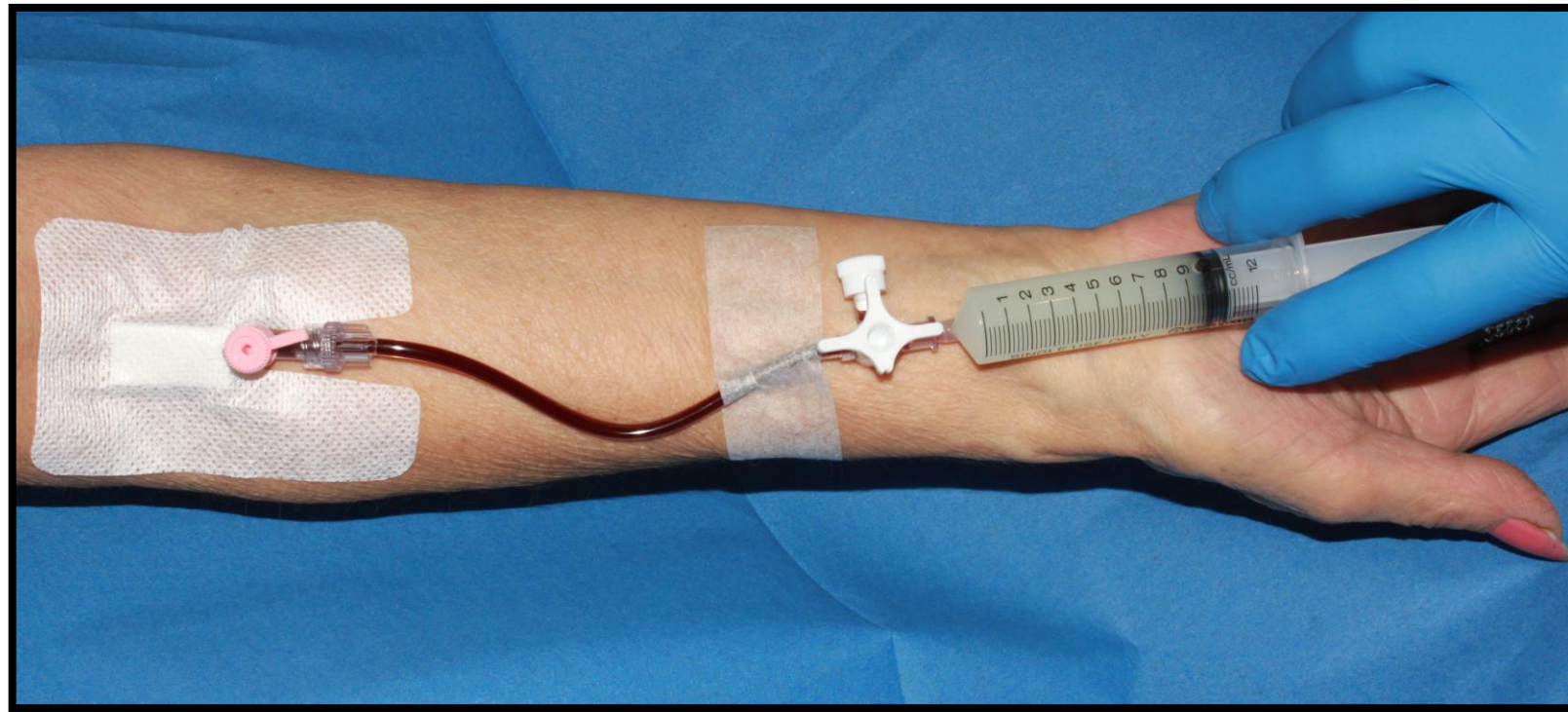
A.Perucchi₁, C.Monti₂, J.Dana₃

1. DDS, Oral surgery specialist, Mendrisio Switzerland, 2. DDS, Lake Como Institute, Como Italy

3. Dentistry Student, Università degli Studi dell'Insubria Italy

OBJECTIVES

To verify the considerations made by the group Käyser/Nijmegen (1) : a **shortened rehabilitation** of a dental arch (extended only up to the premolars) can still give the **same functionality** of a complete dentition, in some **special-needs patients**.

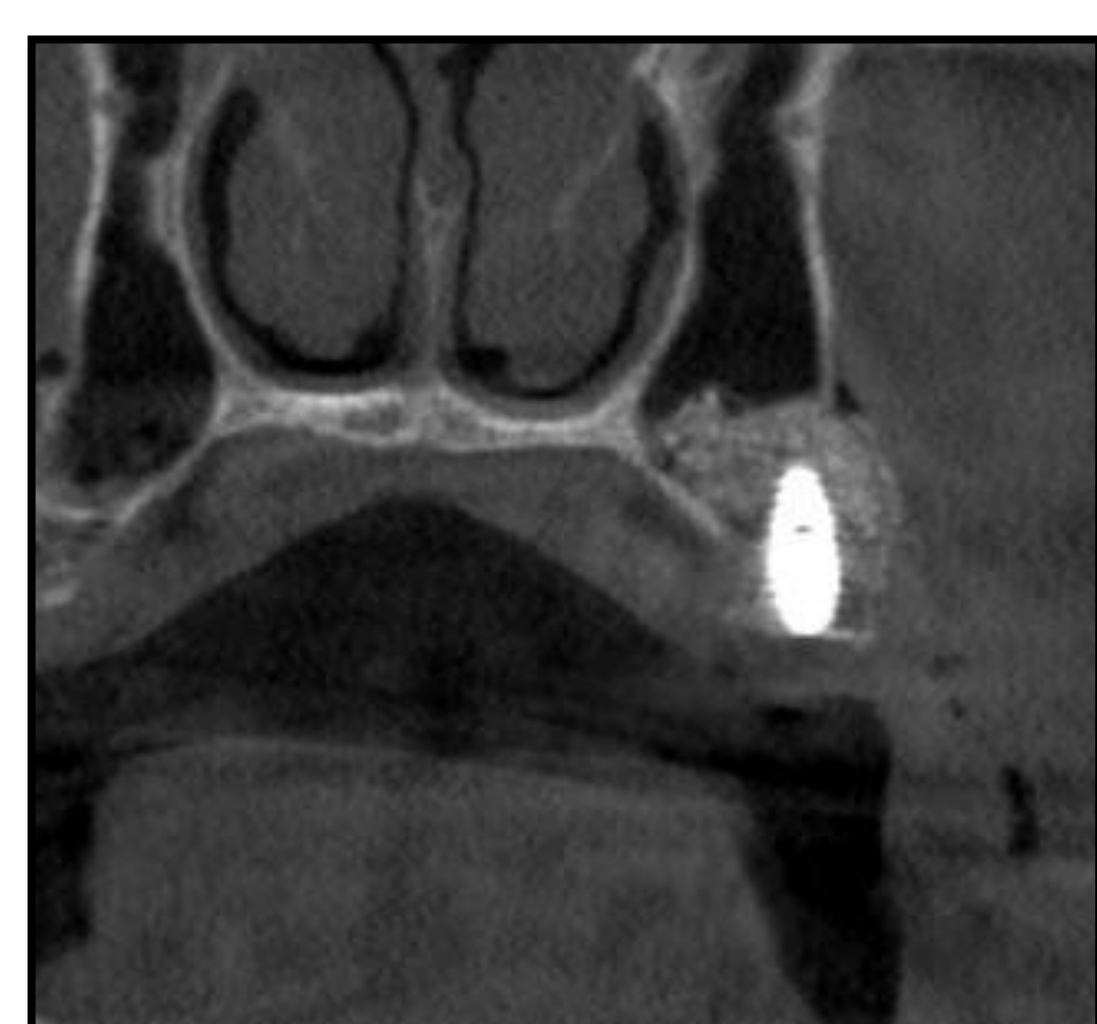
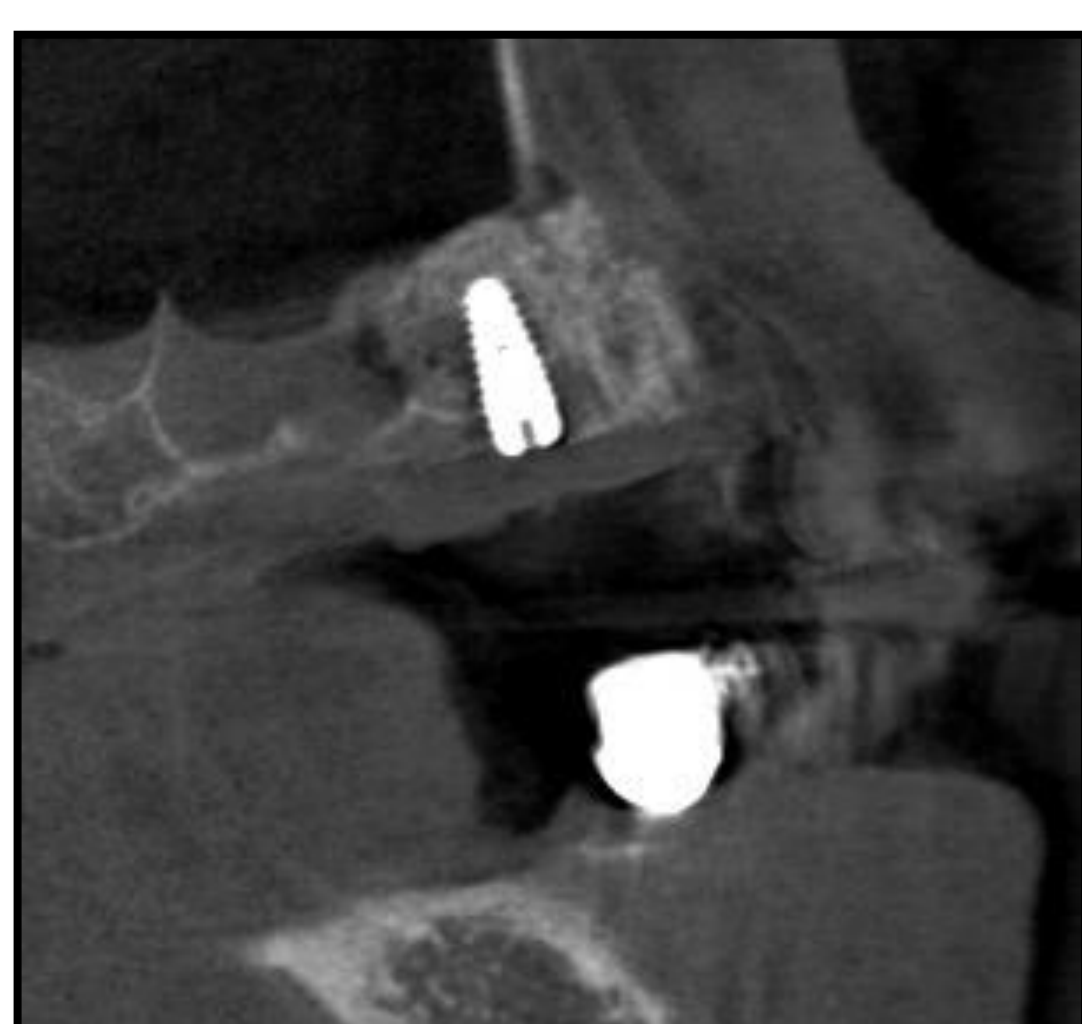


METHODS

The patient, a 75-years-old woman with several health problems such as hypertension, hyperthyroidism, obesity and a prosthesis on the right elbow, showed up with a completely unstable removable partial denture that didn't allow her to chew and speak correctly for years, that's why she also fell into a deep and strong **depression**. Considering her lack of fine motor skills, a minimally invasive implant-prosthetic solution, extended only up to the second premolars, was chosen. The surgery was performed in **conscious anesthetic sedation**, in order to guarantee a high comfort-level. Three Megagen Anyridge implants were inserted in the regions 14, 24 and 25 with external sinus floor elevation of both sectors. At the same time: buccal bone augmentation with allogenic bone regeneration material (Maxgraft® allograft, Botiss), PRF membranes obtained with L-PRF protocol, and pericardium collagene (Jason® membranes, Botiss). On either side of the bilateral sinus lift and in the vestibular GBR, the Maxgraft allograft was mixed with L-PRF according to the **L-PRF Collagen Block** protocol (2). Then, 3 ceramic-coated metal crowns were screwed on.

RESULTS

The one-year follow-up the patient could chew correctly without any TM joint disorder. A complete dental arch **distribute all the chewing loads** on its entire surface. When all the molars are missing, as in our case, the loads are transferred anteriorly. Therefore, there may be an up-regulation of the proprioceptive system, with the risk that the periodontal complex is no longer able to protect the health of the teeth, creating damages even simply through the masticatory force. Hence the choice of reinforced metal crowns: **more resistance and protection**.



CONCLUSIONS

The reduced dentition has simplified the patient's hygiene. The **sanitation maintenance** and the **distribution of occlusal stress** were the two main decisive elements in our choice. Each patient must be examined in its complexity and in its entirety, evaluating the best solution **taking care of every single aspect**, whether it is physiological, pathological, aesthetical or economical.

