The anatomy as the basis of new ways for the dissemination of clinical information. Implementation of a system of anatomical data related to the mastication within the technology of cloud computing

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Chewing is one of the most important functional movement of the stomatognathic system. It 'a highly coordinated neuromuscular motor function, characterized by mandibular movements with a fast and continuous adaptation of the modulation strength. The information resulting from the masticatory pattern, in fact, are important to diagnose the functional status of the patient, such as repeatability and variability of the mandibular movement, neuromuscular coordination between the right and left side, or the ability to adapt to the load during chewing a hard bolus. In the context of scientific research, there is a constant demand for new applications to take advantage of the more technologically advanced clinical information. In this perspective the anatomy is presented as a basis for the study and the 'integration of medical imaging techniques aimed at creating a system of Cloud Computing, able to process and store data. In our study, we found patients with craniomandibular disorders and chewing. Patients underwent an MRI Philips Achieva 3T, at IRCSS "Neurolesi". The protocol included a MRI, fMRI and DTI, then the data obtained were processed processed and finally stored. On this basis we observe as the multimodal integration of different imaging modalities allows for numerous clinical data that favor a proper diagnosis, which is useful for the planning of an effective therapy. In addition, the cloud computing system allows the sharing of data, to be used both in a hospital setting public, as in private dental practices.

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Keywords

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