Summary

Introduction: Magnetic resonance images [MRI] and their digital fusion with computed tomography [CT] data, observed in patients affected with facial injuries, are presented in this study. Material and methods: The MR imaging of 12 posttraumatic patients was performed in the same plains as their previous CT scans. Evaluation focused on quality of the facial soft tissues depicting, which was unsatisfactory in CT. Using the own „Dental Studio” programme the digital fusion of the both modalities was performed. Results: Pathologic dislocations and injures of facial soft tissues are visualized better in MRI than in CT examination. Especially MRI properly reveals disturbances in intraorbital soft structures. Conclusions: MRI-based assessment is valuable in patients affected with facial soft tissues injuries, especially in case of orbita/sinuses hernia. Fusion CT/MRI scans allows to evaluate simultaneously bone structure and soft tissues of the same region.